

72

NO. 5

textile

MAY • 1 • 1947

bulletin

The annual report by W. Ray Bell, known as the mayor of New York's Worth Street, is published in this issue. See "Ten Years Of Cotton Textiles—1937 To 1947," Page 13.

SONOCO

Cork Cots



LOWER ROLL COVERING COSTS

by

1, their superior drafting qualities because
2, of their uniform density which they retain for 3, a longer life through several rebuffings. Ease of application and positive adherence to the roll are SONOCO exclusives that pay an extra dividend.



REG. U. S. PAT. OFF.

SONOCO PRODUCTS COMPANY

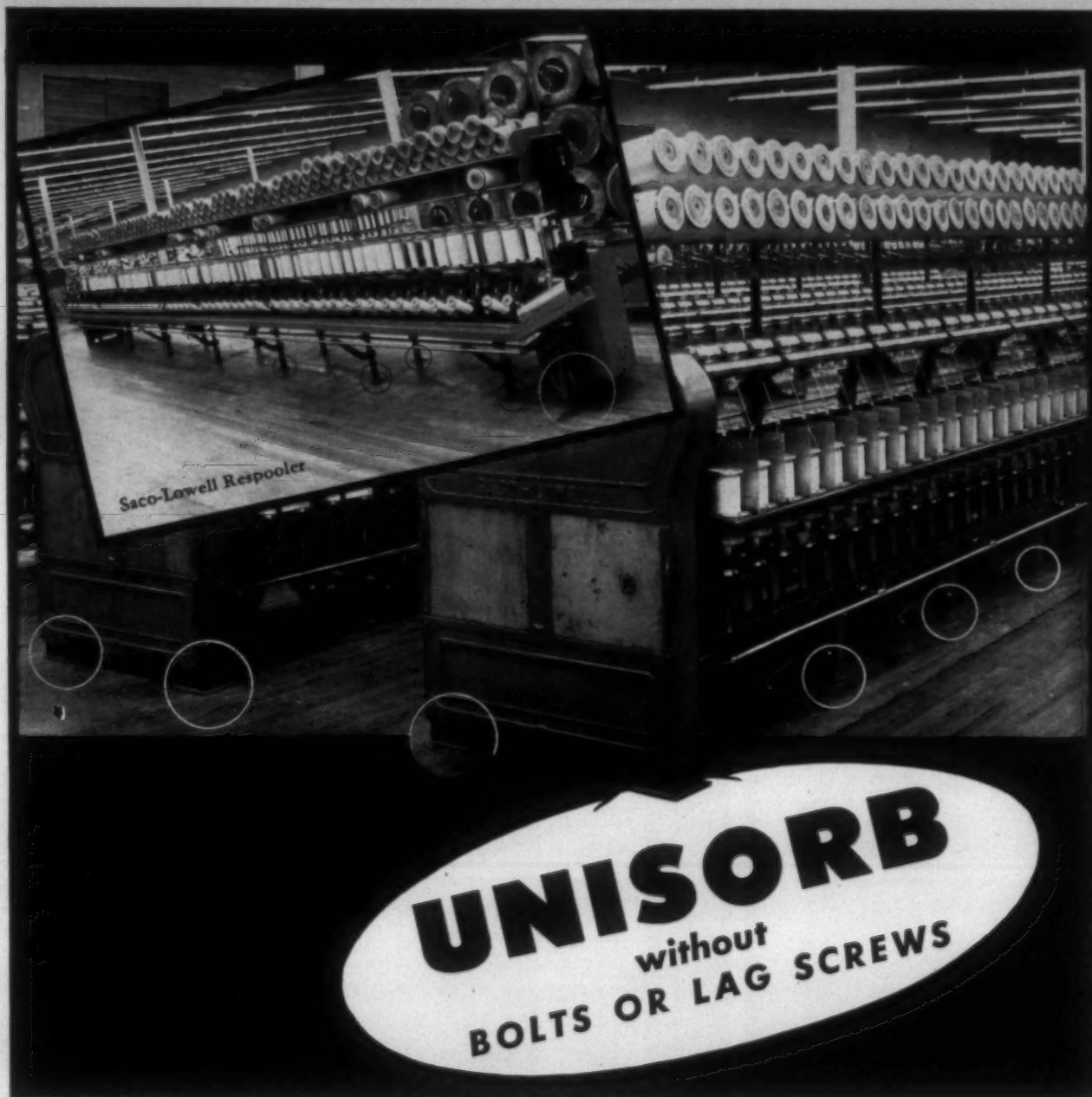
BRANTFORD
ONT.

HARTSVILLE
S. C.

MYSTIC
CONN.

ADVERTISING
INDEX—PAGE 43

DEPENDABLE SOURCE OF SUPPLY



Deering, Milliken's Excelsior Mills at Clemson, S. C., are a model of modern efficiency. It is only natural, therefore, that looms and other machinery would be anchored in the most modern and efficient manner. The satisfaction that Unisorb has given is indicated by its continuing use in other mills under this company's ownership.

This modern method of anchoring is simple, quick and inexpensive. A special cement binds the Unisorb to the machine feet and the floor — permanent set absolutely prevents any riding.

By controlling vibration, Unisorb reduces shutdown hours — saves on machine repairs and building maintenance. By providing quieter

surroundings, it increases efficiency — helps toward greater production.

Send for sample and complete specifications.



LOOK FOR THE RED CENTER

AND UNISORB BRAND MARK

THE FELTERS COMPANY

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Sales Representatives: San Francisco, St. Louis.

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“and I’m Only
5 Years Old”

Pretty big sum for a five-year old!

Pretty big achievement, too, for the five years since the first RCK Finish Flyers were tested by discerning mill owners.

Today, we treasure the enthusiastic approval of big mills, little mills, new mills, old mills . . . over 400,000 RCK Treated Flyers now in use. The beautiful, glossy, black, rust-resistant finish of these flyers is unsurpassed for use in White Goods Mills, reducing eye strain and employee fatigue.

The qualities that have earned RCK *first place* will continue.

Pride of workmanship, practical planning, and high standard materials will combine and increase to keep RCK Finish Flyers the Leader in the Field—from Maine to Texas.

We furnish Spindles and Flyers while yours are being Repaired



IDEAL MACHINE SHOPS, INC.

BESSEMER CITY, NORTH CAROLINA

23RD YEAR OF CONTINUOUS SERVICE TO TEXTILE MILLS

VOGEL No. 14 SOUTHERN OUTFIT

A durable, economical closet
for Mills, Factories and all
types of industrial installation



When installing No. 14
closet trap must be
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The Vogel No. 14
has a vitreous china
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reinforced hard-
wood seat, painted
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drum shaped tank
and union ell flush
connection.

*(The Number 14
is not frost-proof)*

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VOGEL PATENTED **PRODUCTS**

11 YEARS SPECIALIZED EXPERIENCE

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Selling
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Recent sales include villages of
Callaway Mills (1900 houses at
LaGrange, Ga., Manchester, Ga. and
Milstead, Ga.); U. S. Rubber Co., (618
houses at Hogansville, Ga., and Winns-
boro, S. C.); Burlington Mills Corp.
(550 houses at Cramerton, N. C.)

Let us explain our sales plan to you.
No obligation.



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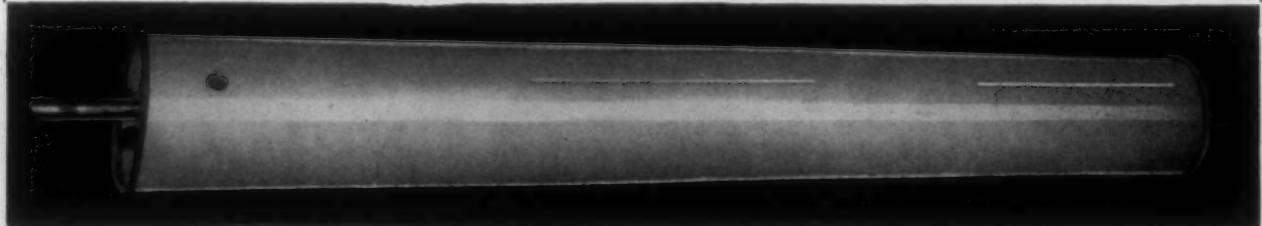
BALANCE IN MOTION

Nature seldom makes a mistake. Certainly there is
no better example of the importance of true balance
than a bird soaring effortless through the clouds.

Jenkins' Dynamic Balancing is man's nearest ap-
proach to perfection in balancing spinning and
twister frame cylinders. By taking nature's perfec-
tion as a standard, Jenkins' Dynamic Balancing
insures perfect balance throughout.



This absolute balance in motion eliminates harmful
vibration . . . permits higher cylinder speed without
costly breakdowns due to premature bearing failures
. . . reduces wear on journals, travelers, and rings.
RESULT! Higher production . . . Lower costs!



JENKINS METAL SHOP, Inc.
GASTONIA, NORTH CAROLINA

It's the **SIDE** of a V-Belt

That **GRIPS** the Pulley
Picks Up the **LOAD**
and Really **Gets** the **WEAR!**

Diagram of V-Belt
in Sheave Groove

Every ounce of load a V-Belt carries must *first* be picked up by the *sides* of the belt. Clearly so, because *only* the *sides* come into contact with the pulley! The sides do all the **GRIPPING** on the pulley. They get all the wear against the sheave-groove wall. The sides *pick up* the load. They transmit that load to the belt as a whole. And then, once more, the sides—and the sides *alone*—grip the driven pulley and *deliver* the power to it.

That is why you have always noticed that the sidewall of the ordinary V-Belt is the part that wears out first.

That's Why the **CONCAVE SIDE** is **IMPORTANT** to YOU!

A GATES PATENT

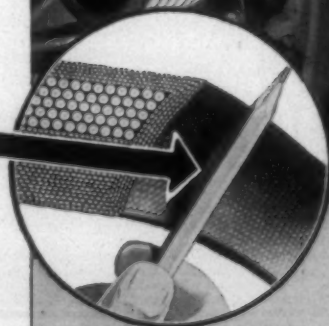
Clearly, since the sidewall is the part that wears out first, anything that prolongs the life of the sidewall will lengthen the life of the belt—and that is why the patented Concave Side is important to you.

The simple diagrams on the right show exactly why the ordinary, straight-sided V-Belt gets excessive wear along the *middle* of the sides. They show also why the Patented Concave Side greatly reduces sidewall wear in Gates Vulco Ropes. That is the simple reason why your Gates Vulco Ropes are giving you so much longer service than any straight-sided V-Belts can possibly give.

★ More Important NOW That **STRONGER** Tension Members are Used

Now that Gates *Specialized Research* has resulted in V-Belts having much stronger tension members — tension members of Rayon Cords and Flexible Steel Cables, among others—the sidewall of the belt is often called upon to transmit to the pulley much heavier loads. Naturally, with heavier loading on the sidewall the life-prolonging Concave Side is more important today than ever before!

THE GATES RUBBER COMPANY Denver, U. S. A.
"World's Largest Maker of V-Belts"



Straight Sided
V-Belt

Fig. 1

How Straight Sided
V-Belt Bulges
When Bending Around
Its Pulley



You can actually feel the bulging of a straight-sided V-Belt by holding the sides between your finger and thumb and then bending the belt. Naturally, this bulging produces excessive wear along the middle of the sidewall as indicated by arrows.

Gates V-Belt with
Patented Concave
Sidewall

Fig. 2

Showing How Concave
Side of Gates V-Belt
Straightens to Make Per-
fect Fit in Sheave Groove
When Belt Is Bending
Over Pulley



No Bulging against the sides of the sheave groove means that sidewall wear is evenly distributed over the full width of the sidewall—and that means much longer life for the belt!

475

GATES VULCO ROPE DRIVES

Engineering Offices
and Jobber Stocks

IN ALL INDUSTRIAL CENTERS

of the U. S. and
71 Foreign Countries

Gates

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SPECIALIZED RESEARCH

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CARBON DIOXIDE FIRE EXTINGUISHERS IN STOCK



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We handle all types of extinguishers. Free survey of your fire hazards by factory representatives on request.

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SUPPLY**

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We make

LONG Blade Spindles

From

SHORT Blade Spindles

by new perfected method of electric welding, and guarantee all spindles not to break under running conditions.

We also change Acorn and Whorl sizes to mill specifications.



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MULTI-V BELTS

B. F. Goodrich Multi-V Belts are true V belts of straight side construction made in accurately machined molds. The two-ply cover takes plenty of wear and seals out moisture, oil and grit. Each load-carrying cord in the carcass is surrounded and cushioned in rubber, and the thick rubber base of the belts allows it to absorb the shock of sudden loads. The use of a special rubber compound in these belts produce 75 per cent less internal heat than other compounds, and the use of Agerite, a patented B. F. Goodrich ingredient, improves aging qualities as much as 200 per cent.

Low stretch cords—floating in rubber carry load, take shock.

Flexible cover takes wear, seals carcass.



"Cool Rubber" shock absorber. No excess heat-producing fabric here.

Charlotte Stock

Information on special

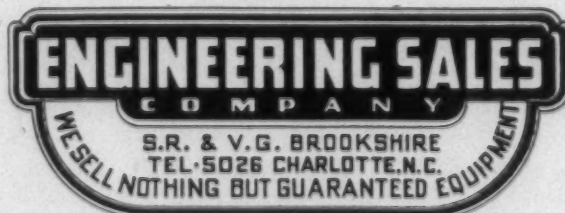
B. F. Goodrich V-Belts

WIRE GROMMET • OPEN END

COTTON GROMMET • OIL RESISTING

STATIC DISCHARGING • OIL PROOF

is available on request





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INSURANCE COMPANY**



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Serving the South Since 1903

ACCOTEX APRONS

...after 5 years on mill frames

Many of Armstrong's Long Draft Aprons have been in continuous operation in leading mills for more than five years yet show little sign of wear, still keep producing top quality yarn. Thus you reduce apron costs when you install Accotex Aprons on your spinning and roving frames.

The extra-long life of Accotex Aprons is due to a special construction developed by Armstrong. Heavy layers of synthetic rubber enclose a sturdy, nonstretch cord interliner. This provides a substantial wearing thickness on *both* the inside and the outside of the aprons. These tough surfaces give years of uniformly fine service. The synthetic rubber used is nonoxidizing and not affected by oil. And since Accotex Aprons are seamless, they won't tear or break open during operation.

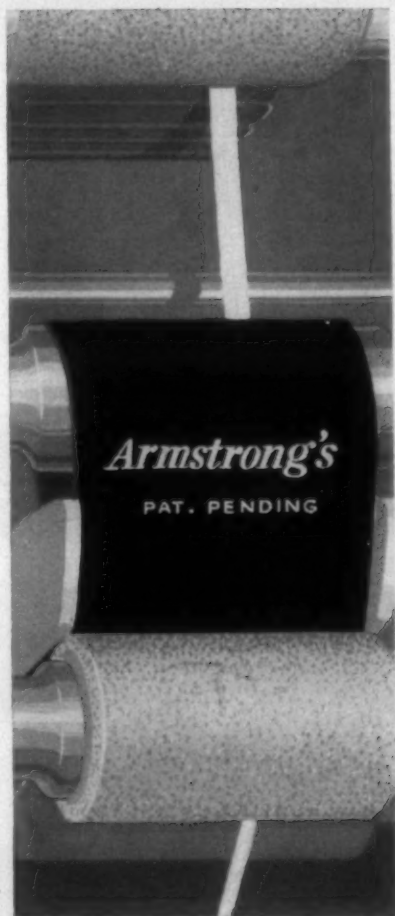
Prove the durability and economy of Armstrong's Accotex Aprons on your own frames. Your Armstrong representative will gladly help you arrange a test installation. Ask him for samples, prices, and complete information. Or write today to Armstrong Cork Co., Textile Products Department, 8205 Arch St., Lancaster, Pa.



Also by the makers of Accotex Aprons ... the Accotex Cot

The most widely used textile roll coverings, Accotex Cots are the result of the same specialized research and technical skill that produced the Accotex Apron. Here are eight reasons why Accotex Cots spin higher quality yarn and increase poundage.

1. **Long Service**—Accotex Cots are tough. And they can be rebuffed 5 or 6 times.
2. **Good Drafting**—Accotex Cots retain their excellent grip, because their cork-and-synthetic compositions resist slicking.
3. **Reduced Eyebrowing**—The resistance of cork-and-rubber to slicking minimizes eyebrowing.
4. **Reduced Lapping**—Accotex Cots have no affinity for textile fibers and are not affected by temperature or humidity.
5. **Good Start-Up**—Accotex Cots are non-thermoplastic, resist flattening.
6. **Solvent Resistance**—Accotex Cots are not affected by oil, water, dyes, or any of the commonly used textile solvents.
7. **Seamless Construction**—Accotex Cots have no seams—no structural weakness to cause premature failure.
8. **Quick Assembly**—Accotex Cots are ready glued for easier, quicker assembly.



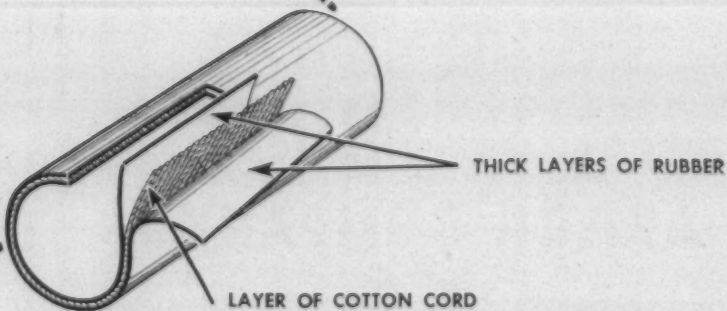
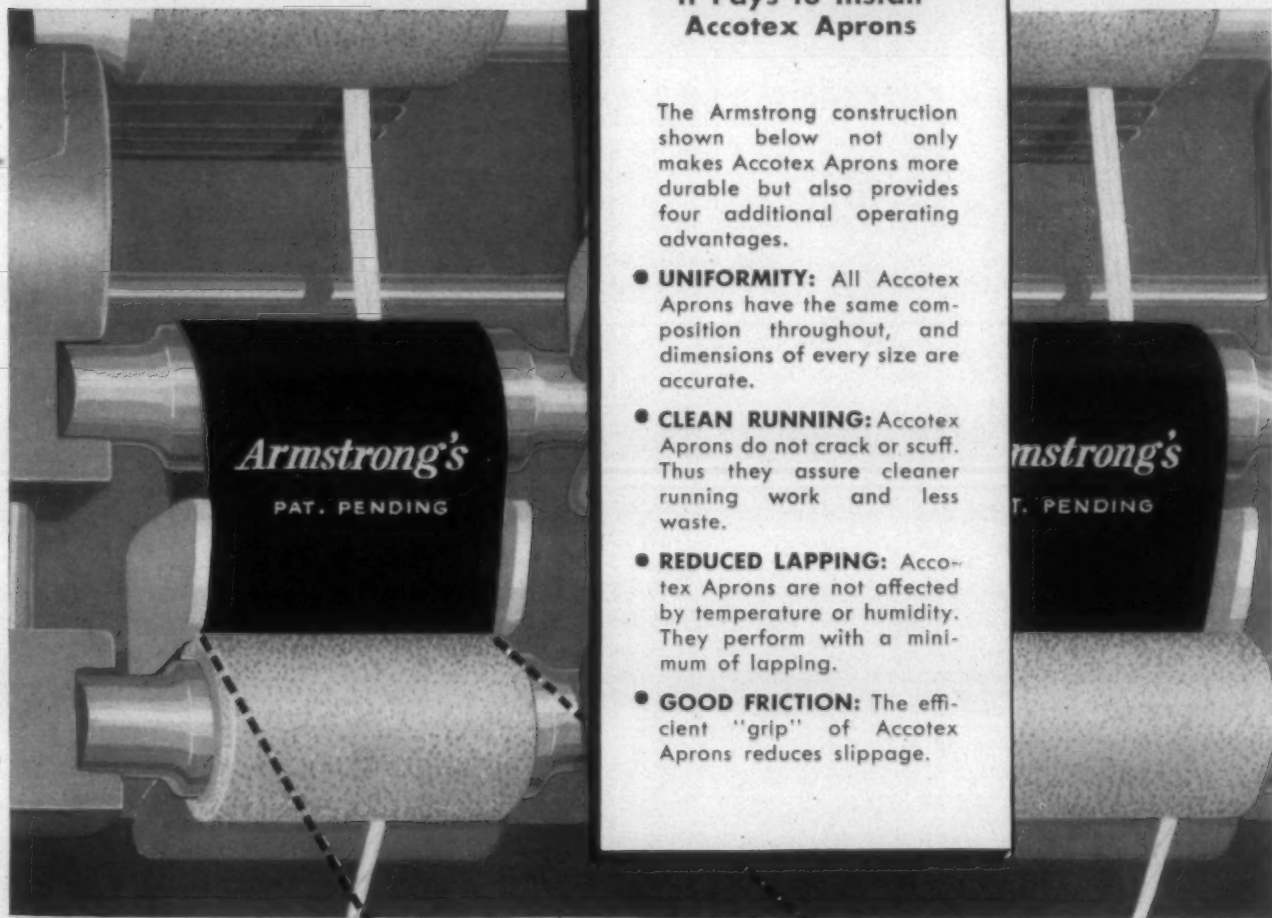
ARMSTRONG'S ACCOTEX APRONS

still produce quality yarn

4 More Reasons Why It Pays to Install Accotex Aprons

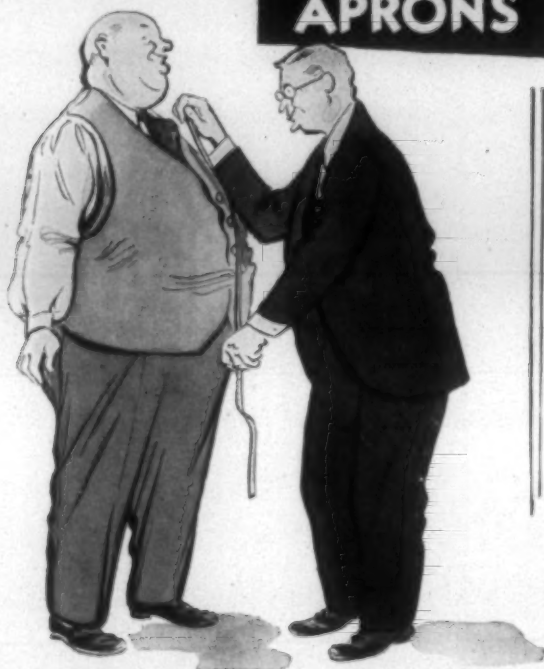
The Armstrong construction shown below not only makes Accotex Aprons more durable but also provides four additional operating advantages.

- **UNIFORMITY:** All Accotex Aprons have the same composition throughout, and dimensions of every size are accurate.
- **CLEAN RUNNING:** Accotex Aprons do not crack or scuff. Thus they assure cleaner running work and less waste.
- **REDUCED LAPPING:** Accotex Aprons are not affected by temperature or humidity. They perform with a minimum of lapping.
- **GOOD FRICTION:** The efficient "grip" of Accotex Aprons reduces slippage.



**ACCOTEX COTS
CORK COTS**

KENTEX PRECISION APRONS



You're **SURE** of a good fit

Custom-built aprons, like tailor-made clothes, fit better—and sure fitting aprons facilitate maximum yarn production.

KENTEX Aprons are custom-built to fit your exact requirements. Made of the finest quality barked or chrome leather—by skilled craftsmen on precision machinery—they are micrometer gauged for thickness, width, length and circumference. That's why we can guarantee a *sure* fit.

KENTEX Aprons can be made to any specification, on short notice. Write us for free samples and prices.

TEXTILE

APRON COMPANY

EAST POINT, GEORGIA

M-B "AMOSKEAG" PNEUMATIC ROLL PICKER

MODEL A.V.T.
20,000 R.P.M.



This is NOT a grinder, but the original Pneumatic tool especially designed for the SPECIFIC purpose of

REMOVING LINT and FLY

from the top rolls and other parts of the drafting elements on

SPINNING FRAMES also ROVING FRAMES

Spindle design permits using PICK (which gathers the fly and lint) 3/16" diameter by 5" long when used on Spinning Frames and 3/16" diameter by 7" long when used on Roving Frames. Exhaust air directed back of roll picker to prevent fly and lint from being blown into yarn when spinning—patent applied for. Steel housing for safety; special grease-sealed bearings. No lubrication required.

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WENTWORTH

Double Duty

Travelers



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Last Longer, Make Stronger Yarn, Run Clear, preserve the SPINNING RING. The greatest improvement entering the spinning room since the advent of the HIGH SPEED SPINDLE

NATIONAL — ETARTNEP FINISH
A NEW CHEMICAL TREATMENT

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NATIONAL RING TRAVELER CO.

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Standardization Trends

RAPID and progressive strides have been made in industrial standardization during the last two decades despite the dearth of information on the policies of standards groups and, in some cases, a lack of understanding of the over-all objectives of standards planning. But, if advancements in this field are to continue at the accelerated pace necessary to meet the social, economic and technical demands of both a more social conscious industry and an expanding economy, greater efforts in proper education and information must be made.

Certain segments of industry and management . . . and even of the public at large . . . must be brought closer to a realization of the benefits and trends of industry-organized standards. Industry's self-imposed and self-regulated limitations on standardization should be made well known. It is imperative that the deterring influences serving now to impede its progress be made clearly understood.

Today, one of the most important trends in standardization is its movement from government domination and toward operation on a voluntary basis by industry. With the American Standards Association, industry's own agent, at the helm, the United States Bureau of Standards will remain in the field to perform only certain specialized standards functions. These will be concerned mainly with basic research.

The domination of standardization by independent enterprise should have a streamlining effect on standards in general. Since standards activities entail the pooling of myriad types of specialized knowledge plus skills developed only through practical experience, industry itself is the only place to which the agency for standardization can turn for the assistance and guidance of able specialists. Now that industry is setting its own standards, these specialists will be more readily available. They should also lend more active support to all phases of standardization.

Of significance, also, is the growing recognition by industry that standards engineers must occupy a more important place among its technicians. For much too long they have been toler-

ated, but not given the proper degree of respect. While work in standardization is accorded recognition in most engineering circles, it seems to be the opinion of some in high places that the benefits derived from standards are highly intangible. Others argue that results from engineering in the field of standardization are usually evidenced a long ways in the future and, therefore, are not as important as the current work of designing new products and getting them into production.

These attitudes must be corrected. The fact that industry is now largely responsible for its own standardization programs will, no doubt, have a desirable effect on this type of thinking. But efforts must be made by engineers in specialized fields such as tool engineering, and by enlightened operating management to correct these entrenched attitudes.

Well directed programs of information must be instituted to distribute standards information broadly. Standards engineers are already cognizant of the benefits to be derived from their work and, therefore, should not be a major object of any such campaigns. Except for some phases of standardization in which the general public has a large stake, this classification has little or no interest in the subject. Educational efforts, therefore, must be directed principally toward business and engineering executives and that part of operating management which is still unenlightened.

Even though standardization has been of considerable importance to nearly all types of manufacturing and servicing for the past 20 years, it is still necessary to impress those who are in position to do most for advancements in this field that standards activities are not designed to make products uniform or to deter design differences. They are set up to effect manufacturing economies that could not otherwise be accomplished. These benefits are passed on to the ultimate consumers which results generally in higher standards of living.

In order to enjoy to the fullest all of the benefits of mass production, everyone in industry who would like to broaden his markets and see higher living standards everywhere should get

behind and co-operate with industry organized standardization.—*The Tool Engineer.*

Federal Spending

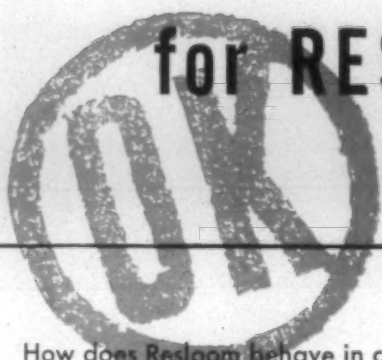
AS boys, our fathers used to follow the same course in limiting our expenditures. We were given 25 or 50 cents per week as spending money in return for the chores we did around the house. We lived within this budget and spent the money on the things we felt would give us the most pleasure. And usually there was a lot of weighing of alternative expenditures to make the money go as far as possible.

Now if we had been allowed to develop a budget of all the things we wanted, it might easily have run to ten, 20 or 30 dollars a week. The capacity of a small boy to think up things to want is almost unlimited. Good arguments for all such expenditures could easily have been developed.

In effect, the bureaus in Washington, under the directing hand of the Budget Bureau, draw a list of their wants. In the aggregate, these requests constitute the President's budget for any year. When you turn loose a group of intelligent and imaginative individuals in the various bureaus, they are bound to see all sorts of areas where they could expand the scope of their operations—and, of course, their expenditures. Here, too, very compelling arguments can be advanced which in the sincere opinion of these individuals conclusively demonstrates the need for the activity and justifies the request for funds . . .

On purely logical grounds, the current drive to arbitrarily reduce taxes on individuals 20 per cent would appear to put the cart before the horse. But as things work out in government circles, this may be the most effective way to get expenditures down. If taxes bring in the revenue, we can be quite sure that the funds will be spent. There is a lot of talk about reducing the debt—with justification—but the first move toward a solvent and expanding economy would appear to be the reduction of taxes that retard initiative and the corresponding reduction in governmental activities and expenditures.—*Mill Supplies.*

Here's important news for RESLOOM-ed wool



How does Resloom behave in cleaning operations? . . . how long does it last? These questions are always asked about a new textile chemical . . . and the National Institute of Cleaning and Dyeing has answered them in respect to Resloom in an official bulletin, stating, in brief:

1. WET CLEANING

Resloom treated wool will be easier to handle in the wet cleaning department than ordinary wool. Wet cleaning procedures ordinarily used in dry cleaning plants should cause no shrinkage whatever.

2. DRY CLEANING

Continued dry cleaning in either petroleum solvents or synthetic solvents (or continued wet cleanings) will not remove the finish.

3. SPOT CLEANING

Spotters will have no particular problems in stain removal. In general stains are more easily removed from Resloom treated wool than from ordinary wool.*

*From "Bulletin Service," Nov. 19, 1946, National Institute of Cleaning and Dyeing, Silver Spring, Md., George P. Fulton, Research Director.

A reprint of this complete bulletin, prepared by this independent laboratory, plus other information on Resloom, may be had by writing direct to: MONSANTO CHEMICAL COMPANY, Textile Chemicals Department, 140 Federal Street, Boston 10, Mass.

Resloom: Reg. U. S. Pat. Off.

SERVING INDUSTRY . . . WHICH SERVES MANKIND

MONSANTO
CHEMICALS — PLASTICS



Ten Years Of Cotton Textiles—1937 to 1947

The Annual Report of W. RAY BELL, President
Association of Cotton Textile Merchants of New York

THIS 16th annual survey of the Association of Cotton Textile Merchants of New York covers the longest period of sustained activity in the history of the cotton textile industry. Except for the depression year of 1938, annual production of cotton woven cloth, including tire fabric, in each year of the decade has exceeded the mark of nine billion square yards. While the volume was adequate in pre-war years to service both consumer and trade demand, even the 10,171 million square yards which we estimate was produced in 1946 fell short of requirements by a considerable margin. By the end of the year, however, many areas of acute scarcity had been relieved, at least partially, and with the end of government controls in the final quarter, prospects of an improved balance between supply and demand had materially brightened.

Formerly scarce consumer goods are appearing more regularly on retail counters and while assortments of size, color and design are often incomplete, it is evident that the problem of procurement has begun to seem less formidable than that of price relationship. Pipelines of supply in the customary channels of trade distribution have been restored and their continuity assured by the revival of forward contracts. Even the beginnings of sellers' competition can be detected in the wide differences of merchandising policies, reflecting as they do, the uneven conditions which distinguish a period of transition from controlled economy to one governed by the direct interplay of supply and demand forces.

Chief of the favorable influences for larger production and its freer flow toward consumption which developed in 1946 was the elimination of government price fixing and the end of arbitrary restrictions on both production and distribution. These happenings came late in the year, during November and December, so that their relief was experienced mainly on transactions calling for delivery in the first quarter of 1947 and later. Even here, complete readjustment to the new situation was not immediately possible since most mills were under contract to make and deliver into specific end use channels the goods required by government orders.

Notwithstanding these difficulties, the return to the industry of its basic responsibilities acted as a vital stimulant to both production and sales activities. For the first time since the summer of 1941, individual managements were in a position to plot their course without outside limitation and to follow policies based on free market transactions. Although there have been wide divergencies of practice

and uneven conditions, following the many dislocations of price and distribution that were perpetuated under the war agencies, these have not retarded a steady increase in general production and a swifter movement of goods into broader channels of distribution. Largely by reason of this improvement in productive activity during the fourth quarter, the calendar year of 1946 nosed out a gain of approximately two per cent in spindle hour activity over 1945. Cotton consumption increased more largely, with 9,827,000 bales for 1946 against 9,144,000 in the preceding year.

The rate of cotton consumption in the final quarter of 1946 was expanded to more than ten million bales on an annual basis, and this has been followed by a monthly average of more than 887,000 bales in the first three months of 1947. Corresponding gains in mill operations over the first quarter of 1946 are indicated in the statistics on spindle hour activity which total roughly 31 billion active spindle hours this year against 27 billion for the first quarter of 1946. Both indices are surprisingly high, exceeded only by the performances given in the war years of 1942 and 1943. They furnish proof positive of the superiority of natural over artificial methods in unleashing the productive energies of the textile industry. Should market and operating conditions continue favorable, there is reason to expect a continuance of these gains which would make 1947 the largest year ever of purely peacetime production. Such a peak has already been reached in 1946 by each of the other two major branches of woven textiles—wool and rayon.

The former problem of manpower deficiency has been rectified by additions to the total number of production workers which in January of this year had reached 470,000, a gain of approximately 50,000 from the beginning of 1946. From the Bureau of Labor Statistics, this represented an increase of 18.7 per cent over the average number of workers in 1939. The payroll index for January, 1947, was 304.4 against the 1939 average level at 100. Average hourly earnings were 91.4 cents, or more than 26 per cent over January, 1946, and compare with 38.9 cents for the year 1939. To the unusually high level of manufacturing costs that are reflected in these bare figures must be added the basic cost of the raw material which for many months has ranged between $3\frac{1}{2}$ and four times its 1939 average price. Thus the risks in producing cotton fabrics were never higher and, in circles outside the industry, the future has for a long time been viewed with great alarm.

It is fortunate that these theories have not altered the industry's course toward full production, nor its conviction

that through an increase in the physical supply of goods, plus their rapid movement in commerce, lies the only true antidote to inflation. Rarely do commentators credit the industry with this outstanding contribution that is made daily by all active units of production. Nevertheless, the influence on the market is greater than any amount of propaganda.

Whether or not these substantial gains in production should have been accomplished at lower price levels is a question of less importance than the fact that in most market areas prices reflect a meeting of minds between sellers and buyers. Once relieved of O. P. A. schedules it was a foregone conclusion that correction of both relative and absolute nature would be sharp in the case of those multi-use fabrics of staple character whose production had been discouraged under O. P. A. rules. This was particularly applicable to the standard fabrics made of print cloth yarns, light and medium weight narrow sheetings and certain categories of fine goods. Here are the most sensitive divisions of the gray goods market and in pre-war years the most competitive. Under the exigencies of war demand for heavier goods and more rigid price schedules than for other fabrics, diversion of looms from the standard constructions had been a widespread practice up until the loom freeze required by Order L-99. Subsequently, many mills found relief in the more liberal mark-ups allowed for converted goods and had accordingly absorbed the risks and responsibilities of the converting function.

Naturally, the removal of all restrictions found a tremendous accumulation of demand posed against supply that was short by even pre-war standards. The most extreme instance of this nature perhaps was in the case of 80x80 print cloths which had been made in 1939 by mills with a total of approximately 30,000 looms. Figures for the past

year indicate that under price control no more than 11,000 looms had been employed on this construction, even late in the year. Production in linear yards was estimated at 170 million for 1946 in contrast with 535 million in 1939. With such a wide gap between actual supply and potential demand, coming from a multiplicity of uses for industrial and household as well as apparel purposes, it is little wonder that the precipitate rise in valuation of this fabric became the focus of all criticism that has been heaped upon the industry's head for uncontrolled price making. Actually, the extreme prices reached in this and other essential constructions reflected less any positive action on the part of sellers than the persistent competition of buyers, each bidding to obtain a larger share of an acutely scarce commodity. A sharp contrast with such experiences that relate to a single division of the market has been the adherence to former ceiling prices on the part of many important market divisions. In others, adjustments have been made only where it has been necessary to cover costs of increased wage schedules and supplies.

The wide differences in price experience since the expiration of O. P. A. emphasize more than the simple truth that values are determined daily by market transactions between hundreds of sellers and thousands of buyers who represent distribution of textiles in all its varied forms. Within the loose description of "cotton textiles" are included such integral divisions as colored woven goods, napped fabrics, duck, towels, sheets and pillowcases, fine goods, narrow sheetings, drills, twills, bedspreads, corduroys, tire fabric, print cloth yarn fabrics and many others, each dependent on appropriate channels of distribution and having a narrow range of production flexibility. In common, their productive sources are all textile mills and most of them use cotton but variables in (Continued on Page 50)

	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947
EQUIPMENT											
Spindles in place at beginning of year	27,573,770	26,704,476	25,994,676	24,940,204	24,504,490	24,157,306	23,757,844	23,342,922	23,105,942	23,806,392*	23,927,706*
Increase or decrease from preceding year	1,678,374	869,294	709,800	1,054,472	435,714	347,184	399,462	414,922	236,960	700,450	121,314
New installation, additions and replacements	772,724	178,280	349,416	414,974	449,848	210,456	7,752	82,736	323,688	323,056	
OPERATION											
Spindles active at any time during year ending July 31st	25,419,110	24,774,004	23,731,050	23,585,938	23,389,454	23,607,508	23,429,252	23,018,828	22,674,852	22,586,512†	
Spindles idle during same period	2,154,660	1,930,472	2,263,626	1,354,266	1,115,036	549,798	328,592	324,094	431,090	1,219,880	
Average number of active spindles based on twelve monthly reports	24,079,455	22,039,179	22,317,552	22,410,966	22,955,205	23,051,400	22,744,106	22,332,080	22,018,529	21,933,578†	
Intermittent spindles (being the difference between average active spindles and those active at some time during year)	1,339,655	2,734,825	1,413,498	1,174,972	434,249	556,108	685,146	686,748	656,323	652,934	
Percentage relation of average active spindles to spindles in place	87.33%	82.53%	85.85%	89.86%	93.68%	95.42%	95.73%	95.67%	95.29%	92.13%	
Spindle hours run	95,409,267,000	76,252,297,000	92,570,738,000	98,279,419,000	121,968,582,000	133,536,052,000	125,413,065,000	114,984,489,000	107,325,501,000	109,368,009,000	
Hours run per average active spindle	3,962	3,460	4,148	4,385	5,313	5,793	5,514	5,149	4,874	4,986	
MARKET											
Production in square yards	9,445,914,000	7,548,977,000	9,044,979,000	9,601,899,000	11,327,903,000	12,204,611,000	11,569,224,000	10,572,421,000	9,779,238,000	10,171,225,000	
Exports in square yards	236,251,000	319,634,000	367,466,000	357,925,000	586,739,000	447,850,000	538,462,000	638,096,000	672,789,000	774,945,000	
Imports in square yards	147,320,000	58,282,000	111,817,000	84,344,000	61,148,000	17,643,000	19,764,000	11,188,000	79,879,000	44,514,000	
Available for domestic consumption	9,356,983,000	7,267,625,000	8,789,330,000	9,328,318,000	10,802,312,000	11,774,404,000	11,050,526,000	9,945,513,000	9,186,328,000	9,440,794,000	
Population at July 1st	129,257,000	130,215,000	131,200,000	131,970,000	133,203,000	134,665,000	136,497,000	138,083,000	139,585,000	141,229,000	
Available for per capita consumption in square yards	72.39	55.97	67.00	70.68	81.10	87.43	80.96	72.02	65.81	66.85	

TEN YEARS OF COTTON TEXTILES—The data above was assembled by the Association of Cotton Textile Merchants of New York from Bureau of the Census reports and information obtained through the courtesy of machinery builders. Cloth production for the non-census (even) years prior to 1941 has been estimated to correspond to spindle hour activity during the preceding census years. Cloth production from 1941 is the War Production Board estimate of June 29, 1942, which is the basis used for subsequent calculations, with appropriate modifications. (*Includes cotton system spindles on other fibers;† partly estimated, consuming cotton only.)



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Adams Heads South Carolina S. T. A.

A PROGRAM of varied nature was presented by the South Carolina Division of the Southern Textile Association when its members gathered April 19 at Parker High School, Greenville, for the annual spring meeting. J. L. Adams of Beaumont Mfg. Co., Spartanburg, was elected divisional chairman to succeed J. B. Templeton of Brandon Corp., Greenville. James B. Lybrand of Mills Mill, Greenville, was advanced from the divisional secretaryship to chairman of its carding and spinning section, and David H. Roberts of Spartan Mills at Spartanburg, was named secretary.

The program featured three addresses of interest to textile plant operating executives. These papers are published, beginning below, along with discussion which resulted from the speakers' remarks.

Making Uniformly Even Yarns On Modern Machines

By JOB J. MILLS, Greenville, S. C.
Consulting Textile Engineer

AFTER the turn of the century and up to the late 1920s, there were not many improvements made in cotton mill equipment or in the techniques employed in the processing of cotton fibers. Except for a few minor changes in the appearance of machinery, a mill erected in 1900 employed virtually the same sequence of equipment as one built in 1927 or 1928. There were several outstanding inventions during this period of time; but the ideas behind these inventions were slow to take hold, with the exception of the tape spindle-drive introduced about 1914 or 1915 and also the Washburn or self-weighted middle roll, that came into being at some time during this period. Therefore, I look upon the late 1920s as about the time the industry began to realize the necessity for improvements in both mechanical equipment and methods.

The subject, "Making Uniformly Even Yarns on Modern Machines," is a broad one, and I should like to deal mostly with the phase, "The Effect of Sliver Weight on Uniformity," and also briefly to compare by departments a conventional organization with an organization in which modern equipment is employed.

The conventional opening room consisted of a bale breaker with an extended apron, which usually fed into a vertical opener. We all appreciate the inadequacy of this equipment by modern standards, as it afforded no blending and little cleaning.

A modern opening line consists of four or five blending feeders, which break up the cotton into smaller tufts and deposit it on a feeding apron. This feeding apron delivers into an opening machine, which in turn feeds into a cleaning unit, most of which employ a Buckley type of beater section. Since we know that the cotton bales, as delivered to the mill, are quite variable in staple, grade and character, the need for blending many bales to insure consistency is recognized. Increased cleaning in the opening room, like blending, is looked upon in an up-to-date mill as a *must*; therefore the requirements for equipment in the modern

opening line have increased over those of the days gone by.

The conventional picker room consisted of either two or three processes, most of which were one-beater machines referred to as breakers, intermediates and finishers. The breakers were fed by a gauge box connected by pipe to the opening room, while the standard intermediates and finishers were fed by lattice aprons on which four laps were doubled.

The single-process picker was the first machine, that can be classified under our concept of modern equipment, to take hold in the industry. Even though a great many of the first single-process pickers were crude hook-ups, they nevertheless proved advantageous over the conventional system. Later years have brought many improvements in single-process pickers, such as distributors and automatic feeding mechanisms, food-roll design, and even motion assemblies. Today single-process picking is used almost universally, and most of us have forgotten that we ever had anything else. The picker room as we know it today has lost no beater sections; however, 16 doublings have gone over the dam.

The revolving flat card evolved from the stationary flat card and the railway head system sometime during the period of years between 1880 and 1885. There has been but little change made in the card since that time; and, for the most part, the card today looks and functions the same as one built before 1900. Later years have brought several items that are applicable to the card, such as the Firth stripper, the vacuum stripper, the continuous stripper, and, more recently, the drafting-roll assembly mounted at the front of the card in the approximate location of the calender rolls. While the card itself has not changed much, in recent years the outlook toward the operation of cards has changed considerably.

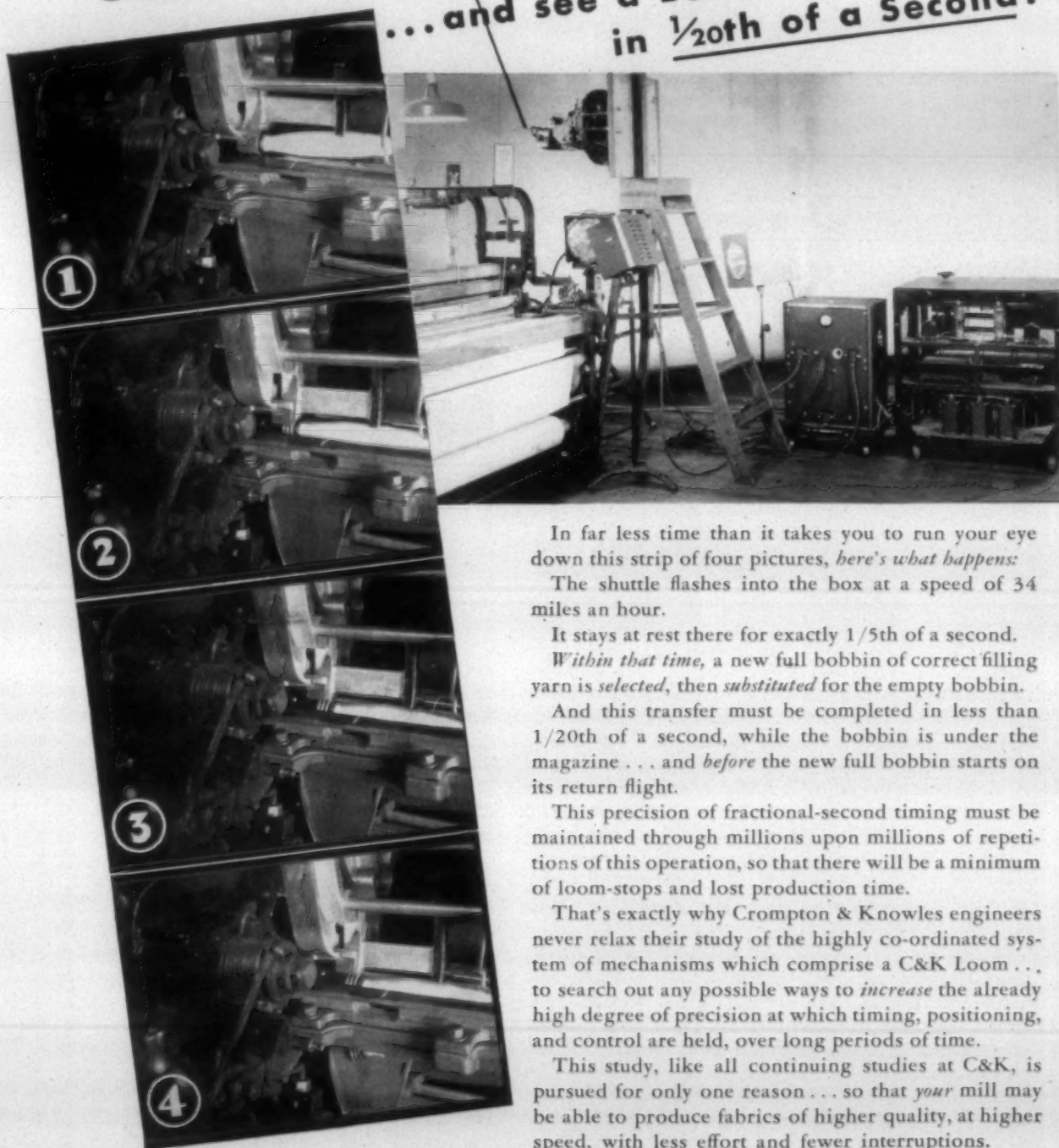
Nowadays most mill men, except those who are sticklers for convention, favor a lighter, 50 or 55-grain sliver rather than the heavy, 60 or 65-grain sliver that was common practice years ago. These lighter slivers bring about an increase in the over-all draft of the card and are usually accompanied by slight increases in doffer spread. This practice is, I believe, advantageous from several points of view. First, there are fewer fibers carried on the cylinder surface, which tends to increase the cleaning action of the top flats. Second, the web is collected from a finer sheet, distributed over a larger area, which tends to decrease variation. This fact is borne out by sliver testing machine recordings, which indicate conclusively that the variation found in short lengths of card sliver diminishes with weight. And, third, a lighter sliver plays an important role in the uniformity of the work produced at the drawing and roving frames.

All of you are familiar with what happens to the card sliver when the cylinder is becoming loaded after stripping. If the cards are stripped consecutively and the first cans from the cards massed behind the drawing at one time, you may expect a maximum of unevenness. As a means of reducing this unevenness to a minimum, today the better practice is to stagger the stripping cycle over every third or fourth card.

Most of us are inclined to look upon the waste removed

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And this transfer must be completed in less than $\frac{1}{20\text{th}}$ of a second, while the bobbin is under the magazine . . . and *before* the new full bobbin starts on its return flight.

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at the card as a necessary evil, not realizing what part it plays in the uniformity of sliver weight from card to card, nor what it amounts to in dollars and cents. It has been stated that the variation in the amount of waste taken out on cards accounts for approximately five per cent of the variation found in sliver weight from card to card. It is believed that this variation can be reduced by approximately one-half, which will also reflect an appreciable saving.

The drawing used in the conventional organization consisted of two processes of four-roll drawing, equipped with metallic rolls. There are many modern mills that still employ two processes of four-roll drawing, on which the rolls have been changed to fluted bottom rolls with synthetic or cork-covered top rolls. While metallic rolls will produce somewhat more than the fluted type, of rolls at a given r.p.m., the reason for this change lies in the fact that metallic rolls are a constant source of bad work. The periodic wearing down of the necks causes an end of the top roll to seat deeper in the flutes of the bottom roll, which results in uneven drafting. This fault is observed by the sagging down of the selvages of the sliver as it passes between the front roll and the trumpet.

While a good many of our modern mills continue to use two processes of four-roll drawing, the lap winder and five-roll drawing-frame combination is considered a little more up to date. From the mill man's point of view, I feel that both of these systems are on a par, provided proper precautionary measures are employed with both. The days of the heavy 60 and 65-grain sliver, except for mop yarns, are over. It is now realized that light drawing slivers, 50 to 55 grains, are essential in the manufacture of good yarns even though it is necessary, in many instances, to operate the drawing frames at a high speed to obtain these lighter weights. The high speed is, by all means, the lesser of the two evils.

The conventional roving consisted mostly of three processes, namely, 12x6 or 11x5½ slubbers, 10x5 or 9x4½ intermediates, and 8x4 or 7x3½ fly frames. The roving produced at the slubbers was doubled on the intermediates, and the intermediate roving was doubled on the fly frames. In the majority of cases the fly frame roving was doubled in the spinning frame creels; there were, however, a few manufacturers who used three-process roving and creeled single in the spinning. Today the single-process roving frame is looked upon as standard equipment for any modern mill. These frames are built in sizes from 12x6 to 8x3½, which is adequate to cover almost any range of yarn numbers.

During the early days of the long-draft roving frame, about 1932 through 1937, almost every installation gave considerable trouble. The first installations were made on the basis of using the heavy 60 or 65-grain sliver that was common practice in the mills back then. Neither the machinery builders nor the mill men realized the necessity for lighter sliver, as this type of equipment was new to the industry. After lighter drawing slivers were employed on these long-draft slubbers, the majority of the troubles disappeared.

Today no one would think of using a drawing sliver heavier than 55 grains on long-draft roving frames, for good results. A 50-grain sliver is better still. The drafting elements of these frames just will not take heavier or bulky masses of fiber and do a uniform drafting job on them. The reason behind this is not complicated and is, I believe,

rather easily explained. As the heavier masses of fibers are fed into the drafting rolls there is a tendency for the top roll to be forced upward, and the effective diameters of the rolls take place at the center of the mass of fibers. The top and bottom rolls exert a pressure on the fibers on the outside of the mass, while the fibers in the center portion depend upon frictional contact between fibers for the holding action. Taking into consideration that the rolls are in constant motion and the instant center between the top and bottom rolls is at a point outside of their surfaces, and that this point travels at a faster surface speed than the surfaces of the rolls, group slippages within the center portion of the mass are bound to follow. It is further known that, as the resultant lumpy places pass to the next set of rolls, an harmonic motion tends to be set up within the weighting assembly. It does not require delicate scientific instruments to record this condition. It can be seen by standing at one end of the frame and watching the unevenness in the ends as they go down to the flyers. After every creeling operation on the slubbers there are usually about six or eight cans of tailings. If these tailings are moved in behind the drawing and redrawn, you will eliminate a prime source of unevenness and ends down.

The present-day spinning frames have been greatly improved over those of a few years ago. These improvements include more rigid frame construction, cylinders whose ends do not wring out so easily, anti-friction tape idlers, higher-speed spindles, longer traverses, and a number of superior drafting attachments.

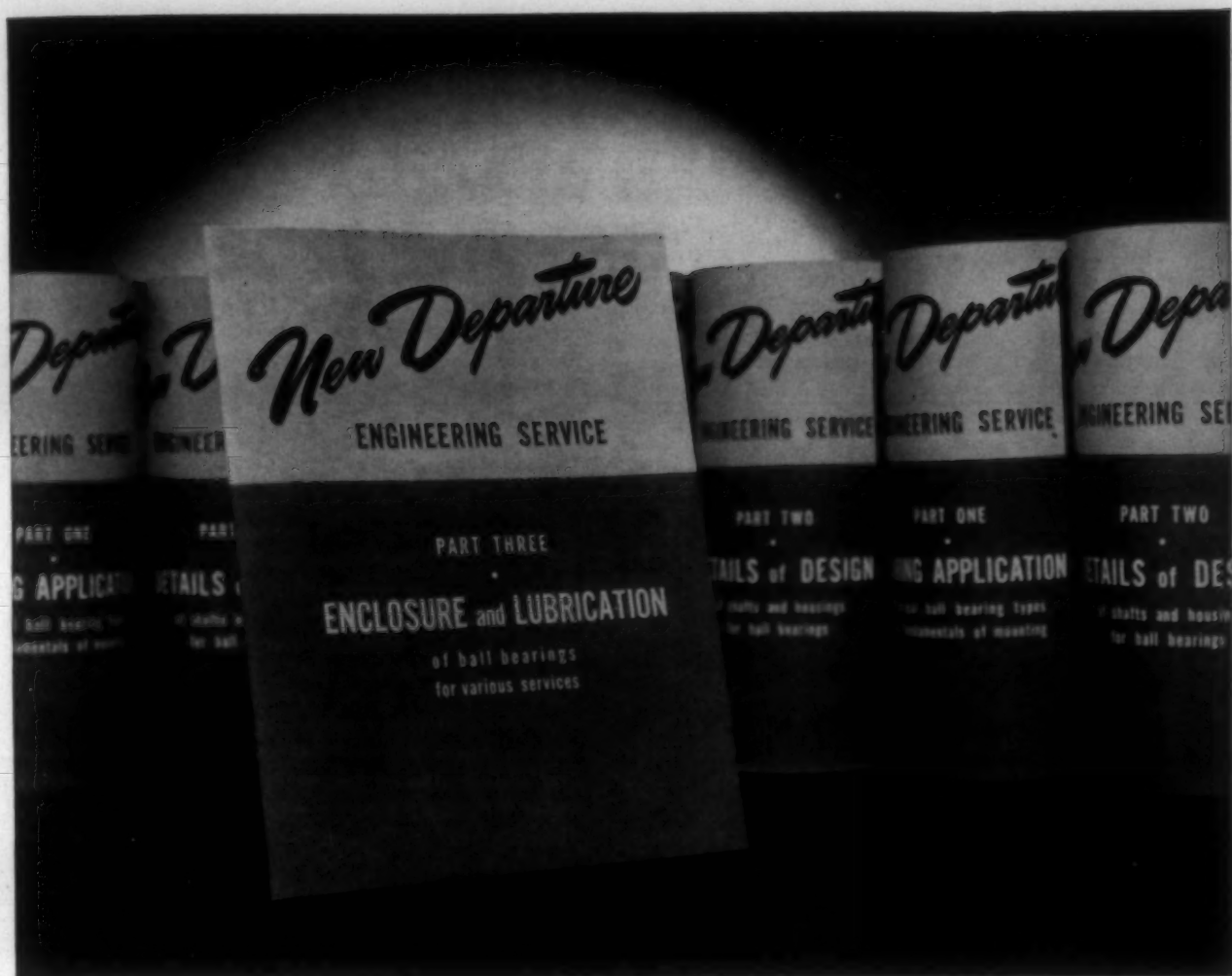
About six or seven years ago a spinning frame featuring compound drafting elements was brought into this country from abroad and operated in a thread-yarn mill in New England. This frame made 100's yarn from .50 hank combed 12x6 roving, fed both double and single, with drafts of 250 and 125, respectively. The yarn made from both the double and single roving compared favorably in uniformity and strength with the same count produced on the mill's conventional equipment. I am mentioning this because I feel that many of you will be interested in knowing that drafts as high as this have been satisfactorily accomplished on spinning.

Having had the opportunity of spending considerable time in mills equipped with conventional machinery, I am convinced that the multiple doublings provided a cover for a multitude of sins. In explanation of this statement, let me say that there have been many conventional mills in which lap, sliver and roving sizes were not taken for years; and they apparently got by with it. In the abbreviated processes that we have today, however, a situation of this kind would not go undetected for long.

There are some of us who still swear by the multiple doubling of the conventional organization, even though there are modernly equipped, low-cost mills around us that are producing good yarns and fabrics.

It is generally conceded that yarn strength is closely allied with uniformity, and it has been proven in mill after mill that stronger yarns can be produced in organizations where fewer processes are used. Scientific tests, in which both the compression type of instrument and the yarn scanner have been employed, also indicate that more uniform yarns and rovings can be produced on up-to-date equipment.

In conclusion, it can be said that the production of stronger and more uniform yarns on modern machines requires the appreciation for newer techniques, the re-training



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of operators, more adequate control methods, and the exercise of closer supervision.

Discussion

JOHN M. CAUGHMAN, president of the association and general superintendent of Spartan Mills, Spartanburg: What do you consider the most valuable test machine or check machine to determine the quality of yarn back in the preparation processes? I am thinking in terms of the lap meter, the sliver meter and the roving tester.

MR. MILLS: Well, I consider that the lap meter is not foolproof yet, but I think it is giving us an indication, and it does serve to give us a bench model. The sliver tester, which works on the compression system, has done a great deal in the advancement of more uniform yarn. I think that is definitely something which you can translate from a testing machine into manufacture and really get some good out of it.

MR. CAUGHMAN: For weaving yarns, which do you consider the more important, the results of skein breaks or of single breaks?

MR. MILLS: The results of single breaks, by all means. You cannot correlate a single-yarn break with that of a skein. There is no relationship, or apparently none, which any man has been able to tie to and compare the results of group breakages and the results of singles.

MR. CAUGHMAN: Haven't we been fooled in our assumption of doublings by taking the results of the break? Most of us did not have strand break for a long time. Almost always we got an improved skein break and reached the conclusion that we had a better weaving yarn; but recently, since we have checked back the effect of doublings with the single-strand break, haven't our eyes been opened a little bit?

MR. MILLS: You are quite right; they have been, I think, I don't know whether you mean the correlation of single-strand break with skein break.

MR. CAUGHMAN: No, with weaving of the stock.

MR. MILLS: Yes, I think you are quite right there. Our viewpoints have changed considerably.

MR. CAUGHMAN: In other words, we are working back to a compromise position?

MR. MILLS: That is right. It is the same thing as correlating single-yarn break with skein break. You can not very easily base together the difference between yarn break and fabric break. There is no correlation there. It seems that the crinkle—or what we call the traction between the warp and the filling—it seems that the shrinkage of the fabric greatly affects the fabric strength; and there is nobody that I know of who has been able to correlate yarn strength with that of the fabric unless you strip the individual yarns out of the fabric and test them singly and as a group and compare with a similar number of unwoven yarns.

FRANK D. LOCKMAN, superintendent, Union-Buffalo Mills Co., Buffalo, S. C.: Did you make the statement that single-processes roving yarn is stronger than the double?

MR. MILLS: Yes, single-process roving. I do not mean there the difference between the double creel and the single creel. I know that there is a difference between creeling double and creeling single; and, while I think that yarn strength in some respects has a definite bearing on weight—on the weight of the fibers in the mass, I am inclined to think that the difference in yarn spun from single roving

and double roving in the creel lies in the fact that the double roving tends to lie in the creel as maybe a fly yarn. I believe that creeling double gives you the effect of fly yarn when spun single.

MR. LOCKMAN: Which gives the better effect?

MR. MILLS: The double roving in the creel does give you somewhat better results.

MR. CAUGHMAN: There is where the single yarn does show some advantage. I don't think you will detect any difference to amount to anything on the skein break between single and double, but when you put it on a single strand I think you will immediately spot the wider variation there.

MR. A.: Have you had any tests on that? Have you sent off any of your yarn or anybody's yarn, single-creel yarn and double-creel yarn, and got a report on it from a reputable concern?

MR. CAUGHMAN: Yes.

MR. A.: What did it show?

MR. CAUGHMAN: Just what I have told you.

MR. A.: I had just the opposite result.

QUESTION: Did the double-creel yarn show better strength or the single?

MR. CAUGHMAN: Double. The highs and lows were closer together. The double in the creel showed more uniformity and more elasticity than the single-creel yarn did. But the single-creel versus the double-creel on the skein break showed in favor of the single.

MR. A.: I had a different experience, and that is why I wanted to bring it out. I had a reputable concern take the double-creel and the single-creel yarn, and it gave a better report on the single-creel yarn made in the same mill.

MR. CAUGHMAN: Well, you are all right; you had eliminated the variations back of you.

MR. TEMPLETON: Did you say, Mr. Mills, that the difference lies in the preparation?

MR. MILLS: I think a great deal of it lies in the preparation. Do you mean back of the roving?

MR. TEMPLETON: Before and during. Especially in the carding and drawing.

MR. MILLS: I do not think you can operate a modern roving frame unless you do take precautionary measures in your back departments—in the opening room, in the picker room, and also in the drawing. I frankly believe now that, after you pass the card, or from the card through the roving frame, the weight of the sliver has more bearing on what you get out than almost any other thing we know of. Other points enter into that, of course—staple length, what twist is added, and things of that kind, and the spacing of rolls. But I think it is more or less based on and the secret of it is lighter weight.

MR. TEMPLETON: That brings up another question. Do you find you need more twist for single-process roving, or does the twist remain about the same, for spinning?

MR. MILLS: I am glad you brought up that. I don't know whether a lot of you fellows have been into that or not, but almost every installation of long-draft roving requires more twist than the three-process roving. That is very true, and it is thought that that twist is necessary because in the three processes of roving the twist added at the roving is never lost; it is merely distributed over larger areas in the yarn as it is drafted out, and it is never lost at all in the drafting assembly; and they feel that the need for the addition of twist in the long-draft roving is because the three-process roving never loses any twist.

MR. CAUGHMAN: Isn't there another factor that enters into that? As you eliminate some of the processes of roving you have eliminated some of the parallelism that goes on.

MR. MILLS: That is a rather tricky question, because as you eliminate the process of roving there is another function that goes into there. Every time you add a process of roving you are adding twist. And every time you creel two ends of roving into a speeder or intermediate those two ends are being drafted out independently, and every time it comes out of that machine it acts as a natural condenser. I think, however, it increases the parallelism but very slightly.

MR. CAUGHMAN: It certainly does the drawing.

MR. MILLS: Yes, it does the drawing. I am certain about that. But I know this; you can produce stronger yarn on single-process drawing than you can on two-process. With the British set-up of drawing they claim an evenier yarn. I think that is what you claim. I do not think it is grounded. But we produce a stronger yarn here.

MR. CAUGHMAN: At the same time, while we produce stronger yarn, we increase the clearer waste.

MR. MILLS: Don't you think the increase of the clearer waste is directly related to the length of the draft that you use?

MR. CAUGHMAN: No, I think it goes back to parallelism again. I don't think those fibers are left as parallel.

MR. MILLS: I see your point, but I think the accumulation of fly on your top clearers and bottom clearers will increase as your over-all draft increases.

MR. TEMPLETON: Each time you draft you have additional fiber breakage, don't you?

MR. CAUGHMAN: Not if you draft properly.

MR. TEMPLETON: Well, if you have cotton all the way from half-inch to $1\frac{1}{16}$ -inch, can you parallel that?

MR. LOCKMAN: If you run double roving on a spinning frame and you take ten yards of each roving and start them in through the frame at the back at the same time, will both ends run out at the same time?

MR. MILLS: One of those yarns or sliver may be slightly larger in diameter than the other, and you may not be able to record it. If it is larger in diameter it will go through faster than the other.

MR. LOCKMAN: Will not that invariably happen when you run double roving?

MR. MILLS: To some extent, yes. But you do have a difference in the length of the roving on your back bobbin and the front.

MR. LOCKMAN: I am not talking about the number of yards on the bobbin but am talking about the same number of yards of roving, and one of them will run out ahead of the other—a good deal, too.

MR. MILLS: If both are the same diameter I think both will run out at the same time.

MR. LOCKMAN: We don't make them the same diameter, then.

Principles Of Warp Sizing

By DR. PAUL SEYDEL, Atlanta, Ga.
Seydel-Woolley & Co.

IN any discussion of sizing we must keep foremost in our minds what the purpose of warp sizing is. It is not to produce a certain feel or a certain stiffness. It is not to give

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added weight or strength to the yarn nor even to lay the fibers. It is purely and simply to obtain the best possible weaving. These other considerations contribute to good weaving, but will not produce it. In order that you can keep this purpose before your mind while we consider various items, I brought a reminder, a sign, "The Purpose of Warp Sizing is to Achieve Good Weaving."

Now we'll go on to try to show what a well-sized yarn should be like, and why no one or two properties can be chosen as a basis for judging yarn. Attempts have been made by practically everyone who has investigated the subject to relate yarn or size film tests to weaving efficiency. Certain work of the Textile Research Institute promises to give some indications of how the warp will behave in a weave room by correlating a number of different properties of the yarn and size films which may be tested in the laboratory. Yet even this work with its complicated relationships of many properties, will not always give an accurate picture of weave room performance. The Shirley Textile Institute of Britain also has not been able to accurately predict weaving quality from laboratory tests.

So sizing is still more of an art than a science, although the scientific angle is being developed day by day, both here and in England.

Let us see what we would consider to be the properties of a well-sized yarn. A good warp size, well-handled on the slasher (and that is very important, too), should give increased tensile strength, flexibility, elasticity, good fiberlay, smooth size film, and hygroscopicity. This last is a technical term meaning ability to attract moisture and hold it . . . therefore allowing weaving to be carried out at lower humidities, with attendant increased comfort to the weavers and less tendency to rust machinery parts.

Tensile strength has been used much in the past as a basis for judging a sized yarn, principally because it is easy to measure. Increase in tensile strength of sized yarns is due to a glueing-together of the fibers of the yarn, so that they do not slip past each other. We can see this in breaking an unsized yarn—the break is uneven with unbroken fibers which have merely slipped and stick out. This is even more obvious if the yarn is first untwisted. A heavily sized yarn will break almost square. The effect of the film itself on increasing the strength is small, as the film strength is much less than the fiber strength—the individual cotton fibers are as strong as steel of the same size.

Then why shouldn't we try to get as high a tensile strength as possible by getting good penetration and glueing together the fibers all the way to the center of the yarn? Well, this has been tried, as fallacy number one. In the first place, the fibers go in and out from the center, so that most of them are glued at some place along their length even with a surface size. In the second place, if we get the size all the way in the center of the yarn, we get a stiff, rod-like quality, due to loss of flexibility. With all the bending a warp yarn must undergo—the changing of the shed and bending around the filling yarns—the yarn must have flexibility.

With a solidly sized yarn, the effect would be much as the action of a solid rubber tire. It is obvious that a tube filled with elastic substance—in the case of the tire, air; and in the case of the yarn, the cotton fibers—is much more resistant to shock as a result of its cushioning effect than a solid tube would be. Penetration is like that—you've got to know when to use it.

Besides the loss of cushioning effect, an excess of penetration will decrease the elasticity of the yarn, since size films generally are not as elastic as the fibers. Elasticity is an absolutely necessary property in good weaving. No matter if the tensile strength is doubled, if the loom wants to stretch the yarn farther than its elastic limit, the yarn breaks—the loom is more powerful than the yarn.

Then we can see that although increase in tensile strength is usually helpful, it should not be obtained at the expense of other important properties. The size film should penetrate just deep enough to give a good anchorage to the outside of the yarn, so that there will be little tendency to shed.

To come back to the question of flexibility—a flexible film is produced only by the proper combination of good sizing materials and good slashing. The size film must not be over-dried on the slasher. We must remember that these starch films behave the same toward heat as they do in bread—bread once toasted will never again become flexible and elastic, no matter how much it is soaked. They will soften, true enough, but their toughness and flexibility are lost forever.

The gums added to a size can greatly affect its elasticity and flexibility. By means of chemicals, using the proper amounts under proper conditions, gums may be made from starches to duplicate the properties of practically all natural gums, with the additional advantages of uniformity, not to mention lower expense. These gums may be incorporated in the sizing compounds, and if desired, chemicals may be added to the compounds to alter the properties of the starch.

Why shouldn't we try to put in materials that make the size film as flexible as possible? The reason for this is that generally flexibility is produced at the expense of hardness of the size film. Although hardness as such is not a particularly desirable character, the film must be hard enough to produce a smooth surface—even more important, it must be a film that is not easily pushed about on the surface of the yarns. You practical men know what troubles occur in balling-up and other miscellaneous items when you get a soft warp. About the same remarks may be applied to any attempt to get the elasticity as high as possible.

As concerns the smoothness of the film, this may be obtained by use of lubricants, or by making a hard film, with not too much softener. There are some materials that must be particularly avoided. During the war we ran across numerous "starch substitutes" and "starch extenders" some of which contained low-grade clays. In a short length of time some of these materials wore into the reeds, and in many cases, harness eyes were cut clear in two in a week or so of using these abrasive materials.

As far as hygroscopicity is concerned, this quality is also one that is desirable only to a certain limit. The ability of a size film to hold moisture will go a long way to prevent troubles from over-drying or toasting the films. And as we mentioned, it will allow use of lower humidities in the weave-room, giving increased strength and flexibility due to the extra moisture in the yarn. On the other hand, it should not be carried too far. Too much of a hygroscopic agent will hold so much water that a soft film will be obtained, resulting in the dreaded "soft warps." A film of this nature is liable to be gummy and sticky as well.

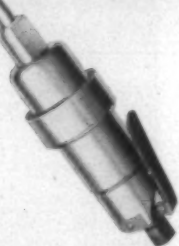
Hardness of the film can be tested on laboratory-prepared film by a gadget known as the Sward hardness rocker. The



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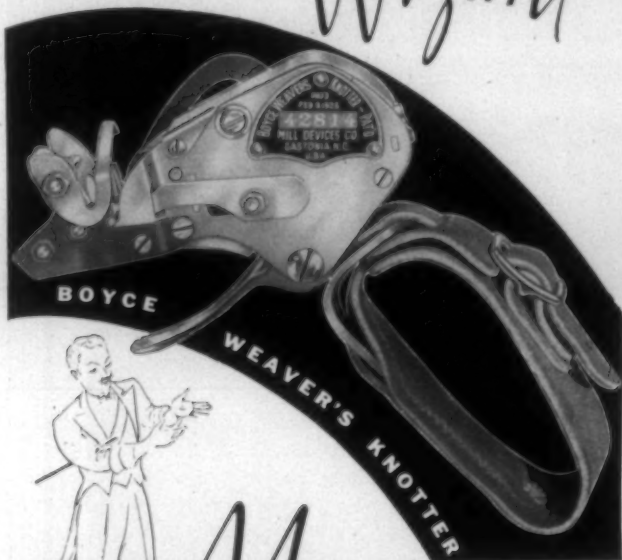


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rocker is set on a film so that it will begin to rock, much like a rocking chair. The number of swings it makes before it stops is a measure of the hardness of the film—it rocks more easily on a smooth hard surface than on a soft surface which gives.

The Textile Research Institute has shown by such tests that films that are either too hard or too soft will not weave well. The former are probably too brittle and the latter not strong enough. So we see that no one particular property can be used as a basis for determining the weavability of a warp. For best results, each property must be well balanced with the others.

Since literally millions of yards of cloth sized with chlorides (which are used by most of the larger size compound manufacturers) are finished each month without complaints, it hardly seems necessary to defend these useful materials. There still exists, however, some feeling against their use. While at Georgia Tech I did some work under the supervision of Dr. Harold Bunger and Prof. C. A. Jones to determine the effect on yarns sized with zinc and calcium chloride. On drying with even more heat and for a longer time than is normally done, we found the strength of yarns sized with chlorides to be actually greater than those sized without. We believe that this increase is due to the water-attracting powers of the chlorides, which hold more moisture in the yarn, thus giving it a higher breaking strength. At least no tendering effect could be noticed at all.

Probably the origin of the prejudice against chlorides came from some troubles that arose many years ago when hot-calendering cloth containing high percentages of magnesium chloride, which is much less stable than the chlorides in use today. Calcium and zinc chlorides are stable much above a temperature that would be sufficient to char the cloth.

The necessity for fiber-laying is obvious to anyone who has seen break-outs due to tangled ends in a loom. Efficient fiber-laying is accomplished by use of the proper materials to give good adhesive qualities to the size film.

I think I will take the rest of my time to make a few remarks on the subject of judging size compounds by analysis. Analysis is a valuable check on uniformity, but beyond that the ordinary analysis does not go. We realize, of course, that a good size compound should contain gums, lubricants and softeners. The properties of these materials should be properly balanced to give the desired effect in sizing.

The reason most sizing compounds contain more or less water is that the gums they contain must be maintained in a more or less soluble state. Once the gums have dried out, they are very difficult to get back into solution, unless spread in the very thin films in which they occur on the sized yarn. Even then, gums derived from starch products may need enzymes or chemicals for their solution. Also the preparation of many of these materials requires water for the chemical reaction—the reaction will proceed only in solution. It would cost more to remove the water than would be saved in freight charges.

Many of the natural gums cannot be put into as concentrated solutions as are normally desired for sizing purposes. Also an important factor is the ability to vary the adhesive properties of the gum. This medium-viscosity starch gum would give a film that would be too sticky for sizing use, and would probably ball-up behind the reed and gum the harness.

Therefore, before the sizer knew just how much of a gum he wanted in his size, he would have to know something about the over-all effect it produced on his size mix—whether it gave the proper viscosity, the proper amount of adhesiveness to lay fibers without gumming, the proper flexibility of finished size film, etc. Experience is a most valuable factor in determining this, and a good man in the slasher room can still do as well as, sometimes better than, the chemist in the laboratory. The chemist has principally the advantage that when he finds out what is wrong, he knows in what direction to move to vary the properties the way he wants them. But the weave room is still the ultimate test.

Analyzing Fats

Another group of materials that is checked in every analysis is the so-called "fats." This term has come to include in the minds of people using textile chemicals not only the pure fats but also the many varieties of oils, waxes and synthetic materials having lubricating or softening properties. Lubricating and softening are not at all the same thing, but may often be confused because most fats act as both. However, it must be remembered that the properties vary considerably from one fat to another. Sulfonated fats are good softeners but poor lubricants, mineral fats are much better lubricants, but not nearly as good for softeners.

Pure beef tallow has some of both qualities, but is not ideal from either standpoint. Blends of other fats often surpass tallow in both properties, sometimes at a cheaper cost. Tallow owes its position to the fact that it was one of the most readily available fats in the days when sizing began.

In analyses, fats are generally divided into saponifiable and unsaponifiable fats. Both kinds vary immensely in properties and cost. Although many persons judge the effectiveness of a size by the amount of saponifiable fats it contains, I believe I can show you by these samples how much a "saponifiable fat" can vary in its properties. We have, for instance, our old friend tallow (which can be either high-grade edible or low-grade inedible—the analysis normally carried out will not distinguish). We have stearic acid and oleic acid, one a solid, the other liquid. We have fish oil, which is a very sticky oil, of no use at all for lubrication; and we have this synthetic fatty ester, which is claimed to have four times the lubricating value of tallow. Here is a sulfonated product, which has excellent softening properties; and here is Japan wax, with which you are all familiar. A textile soap and ordinary soap, too, of the hotel variety—all these materials will show up in a chemical analysis as "saponifiable fats," yet you can see how their properties differ.

In addition, here are samples of partially saponifiable fats: carnauba, candelilla and bees' wax. And here is cotton wax itself, extracted from raw cotton. Some of each of these will show up in an analysis as saponifiable fats, some as unsaponifiable fats. There is linseed oil, too, a saponifiable fat, but one which will dry out on exposure to air to form an insoluble film—definitely not desirable on sized yarns.

Among the "unsaponifiable fats" we have (in addition to the unsaponifiable portions of carnauba, candelilla, cotton wax and others) the mineral products: paraffin oil, kerosene,



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petrolatum, various paraffin waxes, each having different lubricating properties and softening effects, and cetyl alcohol. This latter, although unsaponifiable, is used to make high-grade emulsions, showing that lack of saponifying ability is no basis for judging emulsifying properties. Mineral products, properly blended with emulsifying agents, can be as emulsifiable as any saponifiable material.

Generally spots from mineral oils come from non-emulsified oils dropping from machinery bearings containing dirt and fine metal particles. Properly handled, mineral oils have never given trouble.

Materials Handling In The Textile Industry

By V. G. BROOKSHIRE, Charlotte, N. C.
Engineering Sales Co.

MATERIALS handling is a factor to be reckoned with in all industrial plants, large or small, and certainly, the textile industry is no exception. Fifteen or 20 years ago many of us could not see the advantages, either to ourselves or to labor, in buying mechanized equipment to do the jobs which labor had been doing for decades and apparently was satisfied to go on doing the same old way. The war created and accelerated new economic forces pressing on the country's production capacity which forced the necessity of mechanizing our material handling. The subject of better methods in industry was vigorously applied during the war. It was born of a need for multiplying production, with less labor, to supply our armed forces the world over, as well as that of our allies, in order to win the war. It is just as important in this post-war period and will be just as important to us tomorrow when we get back to earth on a competitive basis.

Just what is materials handling, anyway? I would say that it is the transportation of all materials into and through your plant, through all of your production processes. It is, however, more than transportation in the commonly accepted definition of carrying or moving materials from one place to another in a horizontal plane. It includes lifting, moving, tiering and stacking. Very closely allied to the subject of

materials handling is the subject of storage, because in many cases it is important that the proper method of storing our goods from one process to another go hand in hand with the proper method of handling it. Proper storage and material handling is the pipeline to your production.

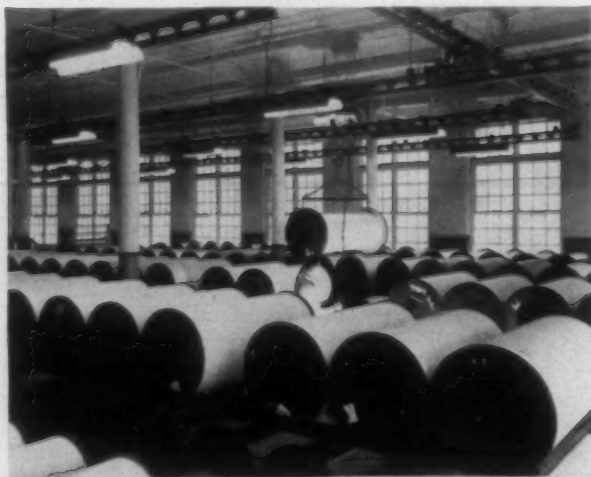
Handling costs money and adds no value to the goods you are producing. To most of us material handling within our plants is a necessary but costly and laborious job. We forget that most of our total manufacturing is based on material handling. Each progressive step from machine to machine, or from one department to another includes a problem in materials handling. Since we pay no freight bills for this interior handling, all too often we have no idea what it costs. It remains a hidden charge against our total manufacturing cost.

The costs vary from one plant to another, but let's try to find out what these costs are and what we can do about them. Every plant has handling problems which are common to all others, and yet each plant is likely to have problems peculiar to its own layout and operation. For that reason, the proper solution of every problem should be considered in its relationship to other factors in the individual plant. Every thorough materials handling survey should take cognizance of the nature of the commodity to be handled, whether bulk or package, size, weight, quantity, building conditions, processes, speed of operations and flow of materials. These factors are general, others will present themselves as individual problems are taken under consideration.

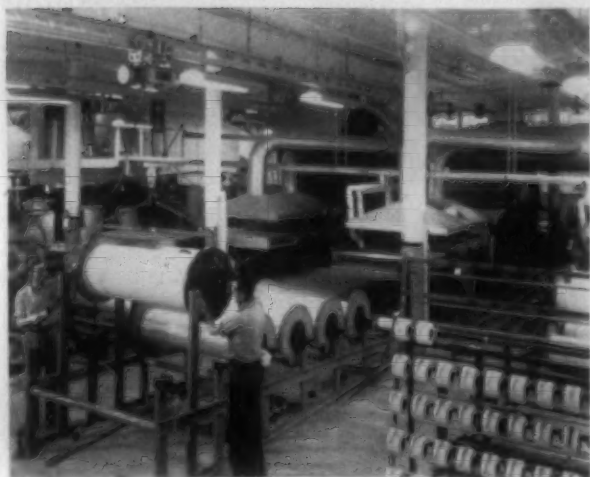
The manufacture and sale of materials handling equipment is a big field and embraces hundreds of different types of equipment, the proper application of which may be a hit or miss proposition unless a thorough study is made of the problem at hand. Securing the biggest return on any materials handling equipment is dependent on the manufacturer's ability to interpret your needs and adapt his equipment to special needs in your plant. Frequently the efficiency of a system is doubled or tripled by special attachments or adaptations made in standard equipment. The engineering service offered by the handling equipment manufacturer may have, therefore, a direct bearing on the success of the system. Each system is designed to meet specific needs "tailored to fit." It is, therefore, logical to assume that experience is the greatest asset any manufacturer of material handling equipment can have, and should be given consideration in the purchase of handling equipment.

It would be virtually impossible to catalog in a few minutes all of the types of material handling equipment, which range from the lowly floor truck to the finest of automatic dispatch systems. Very often a single plant will find uses for a dozen or more different types of handling equipment, such as floor trucks, hand lift trucks, portable elevators, electric trucks, cranes, tramrail systems, conveyors, chutes, etc. Each form an interlocking unit in a general plan, and each should be engineered to fit your job.

We might discuss some of the places throughout the average cotton mill where the handling problem seems the greatest and where a good many mill men have done something about it. For instance, around our warehouses where we store both our raw stock and finished goods, we are handling large packages weighing 300 to 500 pounds, and more each. This lends itself particularly well to material handling equipment because we are not only confronted with transportation but also double-decking or tiering of the



Showing Tramrail system for handling section beams from storage racks to slasher creels.



Loading slasher creels from section beam storage racks behind slashers at Drayton Mills, Spartanburg, S. C.

goods. In many cases we must have selective storage because of many grades, styles or stocks. Many men have found that they can use electric or gas industrial fork type trucks which will handle several bales or packages at a time and also do their tiering. In many cases one or two men with an electric fork truck will supplant as many as eight to ten hand truckers and the tiering is done with all the ease in the world. Other mills are using overhead tramrail cranes to do the handling within the warehouses, and of course many are using hand trucks with portable elevators or stackers. Some mills have mechanized the handling of their laps and roving cans from their picker and card rooms. This is particularly advantageous when the departments are not adjacent to each other or not on the same level.

Our next big handling problem in many mills is the yarn, both filling and warp, from the spinning to spooling, yarn conditioning, weave room or to whatever process it goes to next. In most cases this also involves a certain amount of storage which can be in bins, boxes or trucks as the conditions permit. This operation has been accomplished by the use of various types of equipment. Some use belt conveyors, chutes, electric lift trucks for handling it in boxes, to a number of other methods. Where the departments are distantly located, many mills have tramrail with automatic dispatch units, into which they load their trucks of yarn, press a button and the unit raises and goes to the other end where it is unloaded, and re-loaded with empty trucks to be returned.

Another important phase of handling in the mill is that of the section warp beams and loom beams. Here again we have large packages to handle and the tendency is toward still larger beams. There are several ways of doing this but one of the most popular is that of overhead tramrail where the section beams are picked up with a hoist at the warpers, in many cases weighed on track scales so that they do not have to set the load down to get the weight, and carried to storage racks which are usually located back of the slashers. The same system picks the beam from storage for loading onto the slasher creels. The same type of system generally works well for handling of the loom beams from the slashers into storage and onto the tying-in rooms. I would like to mention here that a good many mills have installed a vertical type storage rack, which in connection with the overhead handling system, gives them 100 per cent selective storage on these beams. This is extremely important in

plants that are running a lot of different style goods. Any one beam in the storage area can be had without moving any other beam to get it out. This saves a great deal of damage as well as handling of the beams.

Our next operation would probably take us into our weave rooms where our warp yarn is handled in large beams, the filling yarn in boxes or box trucks, and the cloth in rolls, and in many cases, large rolls. Also, not to be overlooked is the problem of collecting the quills or bobbins which have to be handled to the quill cleaning machines, on to storage and back to the spinning room. All of these are plain everyday problems to all of you and have been solved by some mills by the use of various types of handling equipment. Overhead cranes and tracks have been installed for handling loom beams. Conveyors and electric powered lift trucks have been applied for handling cloth and filling yarn. In a number of instances, automatic dispatch systems have been utilized for carrying cloth to the cloth room. The idea of automatic handling is becoming more and more popular among our Southern mills as we, as material handling engineers and mill executives, learn more about what can be accomplished and how simply it can be done. I could take you to a tire cord plant nearby where they have a system which will pick up a 1,200-pound beam in the storage department and be dispatched to any one of 132 twister frames in the plant. When the unit arrives at the designated machine, the opener picks up the empty beam with an extra hoist on the unit and drops the full beam into place on the machine, presses a button and the dispatch unit returns automatically to the storage room.

Another plant has purchased a system which enables the receiver in the cloth room to dispatch a unit, on call, to any loom in their two weave rooms to pick up a large roll of cloth which will be automatically returned to the cloth room. We could cite you jobs in the Carolinas and Virginia that are even more automatic in their handling than those mentioned above. Long years of service have proved that they are entirely practical, and in most cases, the labor saving, to say nothing about the other advantages such as efficiency in production, safety in handling, etc., will pay for the system in two to three years. This is true on most types of properly applied mechanized materials handling equipment.

There are many more problems (*Continued on Page 45*)



At Drayton Mills, Spartanburg, S. C., slashers are doffed with a Cleveland Tramrail overhead system equipped with electric hoist.

Master Mechanics' Section

Some Comparisons Of Mill Lighting Fixtures

Part Two of a Series by JAMES T. MEADOR

YOU will recall that the April 1 issue of TEXTILE BULLETIN carried the first of this series, which covered some comparisons of both the 40-watt and 100-watt fluorescent tubes in the three colors of light, that is, 3,500° white, 4,500° white and the 6,500° white, or, as popularly known, the daylight color. These comparisons covered the light output, called lumens, for these various tubes, with the foot-candles of light intensity for different spacing areas per fixture being given.

Now, in this article, let's see how the information can be of use to us in planning a lighting system for an average cotton mill running average numbers of yarn (either cotton or rayon) and weaving such goods as sheeting and print cloth, and, remember, we are still basing our calculations on the 4,500° white color.

Calculations For Double-100 Fixtures

So, we start with the card room, instead of with the picker room, as the underwriters favor the dust-tight, or vapor-proof R.L.M. dome reflector type of fixtures here. In this case let us take the case of a large mill in the Piedmont Carolinas section, having a warp card room 125 feet wide by 240 feet long, in which we want a light intensity of approximately 22-23 foot candles. By reference to Page 28 of the April 1 TEXTILE BULLETIN, you will see by the tabulation (upper left) that the double-100 fixture will give approximately 23 foot-candles on a spacing of 13 feet six inches by 13 feet six inches, or any equivalent spacing on the asymmetrical or staggered basis, giving 182 square feet per fixture.

Warp Card Room: The area of this room will be found to be 125 feet by 240 feet = 30,000 square feet. Number of fixtures required for this intensity at 182 square feet of area per fixture:

$$\frac{30,000}{182} = 164.8 \text{ or } 165 \text{ fixtures.}$$

Filling Card Room: Dimensions, 125 feet wide by 200 feet long. Desired light intensity approximately 23 foot-candles. Area of this room: 125 feet by 200 feet = 25,000 square feet. Number of fixtures required (182 square feet per fixture):

$$\frac{25,000}{182} = 137.3 \text{ or } 137 \text{ fixtures.}$$

Warp Spinning Room: Dimensions 125 feet by 240 feet. Desired light intensity approximately 27-29 foot-candles.

Area of this room: 125 feet by 240 feet = 30,000 square feet. Number of fixtures required (144 square feet per fixture):

$$\frac{30,000}{144} = 208.3 \text{ or } 208 \text{ fixtures.}$$

Filling Spinning Room: Dimensions 125 feet by 230 feet. Desired light intensity approximately 27-29 foot-candles. Area of this room: 125 feet by 230 feet = 28,750 square feet. Number of fixtures (144 square feet per fixture):

$$\frac{28,750}{144} = 199.7 \text{ or } 200 \text{ fixtures.}$$

Spooler Room: (Barber-Colman spoolers and warpers): Dimensions 50 feet by 80 feet. Desired light intensity, approximately 34 foot-candles. Area of this room: 50 feet by 80 feet = 4,000 square feet. Number of fixtures required (121 square feet per fixture):

$$\frac{4,000}{121} = 33 \text{ fixtures.}$$

New Weave Room: Dimensions 125 feet wide by 240 feet long. Desired light intensity, approximately 34 foot-candles. Area of this room: 125 feet by 240 feet = 30,000 square feet. Number of fixtures required (121 square feet per fixture):

$$\frac{30,000}{121} = 247.9 \text{ or } 248 \text{ fixtures.}$$

Old Weave Room: Dimensions 125 feet wide by 240 feet long. Desired light intensity, approximately 34 foot-candles. Area of this room: 125 feet by 240 feet = 30,000 square feet. Number of fixtures required (121 square feet per fixture):

$$\frac{30,000}{121} = 247.9 \text{ or } 248 \text{ fixtures.}$$

Cloth Room: Dimensions 60 feet wide by 120 feet long. Desired light intensity, approximately 34 foot-candles. Area of this room: 60 feet by 120 feet = 7,200 square feet. Number of fixtures required (121 square feet per fixture):

$$\frac{7,200}{121} = 59.6 \text{ or } 60 \text{ fixtures.}$$

Now, having done all these (Continued on Page 44)

Here's BIG NEWS about ALEMITE POWER LUBRICATION

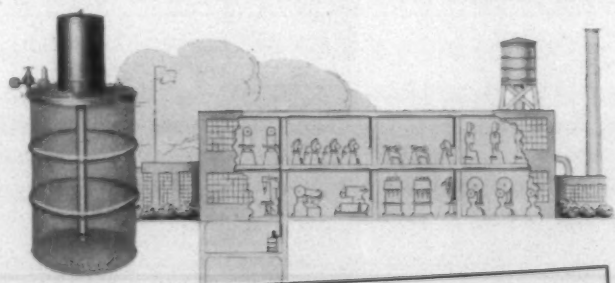
1. Delivers pressures up to 5000 pounds per square inch.
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Ganging Up On Senators

A man who recently visited Washington, D. C., says that the efforts of the C. I. O. and the A. F. of L. to put pressure on United States senators is something to behold.

They have a definite plan of organization and operation and each gang operates along exactly the same lines.

A "gang" usually consists of four white men, two Negro men and two white women and they have access to the Senate reception room.

Whenever a senator enters the reception room either from the outside or from the Senate chamber a gang surrounds him and he cannot keep going without making bodily contact.

They force him to sit down while they harange him and include threats about his next election. Whenever he gets up and starts to leave two members of the gang step in front of him and stand so close that he cannot take a step without being "guilty" of pushing a union representative aside.

The man who made the report to us said that nothing like it had ever previously been seen in Washington.

Both senators and representatives know, however, that public sentiment in their home states is overwhelmingly in favor of restriction upon the activities of labor unions and are remembering that 58 of the members of the House who voted to sustain President's Truman's veto of the Case Bill were defeated in the last election.

The fact that organized labor did not, or could not, deliver votes to those who did their bidding in the matter of the Case Bill veto greatly weakens the threats of labor leaders against those who now favor placing restrictions against unfair tactics upon the part of organized labor.

Senator Clyde R. Hoey of North Carolina certainly expressed the sentiments of the people of his state, and probably the ideas of the people of many other states when he said recently:

Legislation now pending before Congress will not destroy unions, as is charged, but is intended to keep labor "dictators" from dis-

rupting the national economy by strikes and to assure everyone "the right to work," whether in or out of a union.

Both the House and Senate measures "preserve the full rights of labor to organize and to bargain collectively. The legislation protects the workers from discrimination, intimidation and coercion, and gives them full rights under the law as other people have, and protects them fully in their jobs.

Yet by reason of the unfair laws now in effect, and especially the Wagner Act, the heads of these labor unions are able to ignore the rights of the other 43 million workers and prevent them from being employed at various jobs throughout the nation, because they do not wish to join the union. I would not take any rights away from the 15 million union workers, but I would guarantee and make secure the rights of the 43 million workers who do not belong to the unions. I insist upon the policy that a person who wishes to work, and whose employer wishes him to work, should be allowed to do so without regard to whether the worker is a union member. This is a free country and in order that freedom be extended to all, a monopoly should not be granted to any group to proscribe and prevent others from working, unless they yield to the demand that they join the union.

It is a dangerous situation in any country when one man has the power to issue an order to stop 400,000 men from working in the coal mines, and yet, that is the power which John L. Lewis is exercising. The National Labor Relations Board, under the provisions of the Wagner Act, has refused to permit 135,000 union miners who wish to leave John L. Lewis' union and join an independent union, to do so. They want to get rid of Lewis and be free of his domination and control, though they wish to continue as union men. This law, when passed, will give them that right and they will be free of the domination of Lewis and his autocratic control.

Senator Hoey also called attention to the fact that a recent contest between Walter Reuther and R. J. Thomas, for control of the automobile workers, stopped automobile plants for 113 days and cost the workers \$100,000,000 in wages. Although only 22,000 voted in favor of the strike, 175,000 automobile workers were forced with idleness and loss of wages.

Citizens who believe in freedom and in the "right to work" should help counteract the work of the C. I. O. and A. F. of L. gangs now infesting the congressional rooms in Washington, by writing representatives and senators and urging other citizens to write similar letters.

Seek An Excuse To Carry On

American communists and near communists, and certain affiliates who call themselves "liberals," are trying to circumvent the current wave of public sentiment against communism.

They seem to have the idea that they will be permitted to carry on if they can convince the public that their objective is to create a friendly feeling towards Russia rather than win converts to the Russian theory of communism.

They have recently issued such a statement and among the signers were Actor Melvyn Douglas, husband of Representative Douglas of California; the formerly pro-Russian Max Lerner, editor of *PM*; Authors Louis Bromfield, Stuart Chase, Russell Lord and William L. White; Commentator Raymond Swing; Abe Fortas, former Undersecretary of the Interior; William H. Davis, former War Labor Board chairman; Labor leaders Clinton S. Golden and John W. Edelman (C. I. O. Textile Workers Union of America); former F. E. P. C. Director Malcolm Ross; Howard W. Odum, sociologist, University of North Carolina; Struthers Burt, author and editor; and Dr. Frank P. Graham, president, University of North Carolina.

We wonder how many people can be made to believe that Max Lerner, editor of *PM*, and many of the others who

signed the statement have no interest in communism and are only interested in promoting friendship for Russia.

While asserting their great interest in promoting friendship with Russia, they utterly fail to explain why they are so much interested in friendly relations with Russia and yet have never made any effort to develop similar relations with other countries such as France, Finland, Korea, Chile or Peru.

A group of "liberals" exhibits a peculiar interest in friendship with Russia from whence comes communistic theories which bear a close relation to their own ultra-liberal expressions and entirely ignore the problem of friendship with other countries.

In the years 1931 to 1936, the Soviet Government sent large sums to the United States in an effort to spread communism here, a policy which Russia has now discontinued, and many Americans went to Russia at Russian expense to study communism and prepare to become active agents of communism in the United States.

In late 1934 or early 1935, Dictator Stalin, addressing a group of American communists who were visiting Russia, said:

I think that the moment is not far off when a revolutionary crisis will be unleashed in America, and when that revolutionary crisis comes in the United States, it will mark the end of world capitalism. The Communist Party of the United States must be armed to be able to meet this historical moment and to head the forthcoming class war.

For several years prior to 1934, Dr. George S. Counts had been very active in behalf of the Soviet Union and was regarded as one of the leaders in the effort to establish communism in the United States.

One issue of the *Daily Worker*, admitted organ of the Communist Party, said:

Dr. George S. Counts, associate director of the International Institute of Teachers College, Columbia University, will be the chief speaker at the first membership mass meeting of the New York branch of the Friends of the Soviet Union, to be held Friday night, at 8 o'clock at Irving Plaza, 15th Street and Irving Place.

In the face of that statement it would be difficult for anyone to successfully deny that Dr. Counts was not actively interested in the promotion of communism in this country, in fact, he was generally regarded as intensely interested in communism and the leader in selling it to American youths.

In an effort to get American youths to sit at the feet of communists and become sold upon the pernicious theories of their doctrines, Dr. Counts organized in the early months of 1935 a campaign to send students to a summer school of Moscow University.

On this page is a reprint (in reduced size) of the title page of the pamphlet which was, in 1935, distributed over the United States as a promotion for that campaign.

It will be noted that the American Advisory Organization was headed by George S. Counts and Heber Harper.

Among the names of the National Advisory Council will be found many of the names of persons who recently signed the statement asserting that they are only interested in promoting friendship with Russia.

In 1935 they backed a campaign organized by the notorious Dr. George S. Counts for the purpose of encouraging American boys and girls to go to Russia and become converts to communism, but now that this country has developed a strong sentiment against communists and communism, they assert that they are only interested in promoting friendship with Russia.

They neglect to state why they are only interested in Russia but have never evidenced any interest in promoting friendship with other countries.

Men who gave their backing to the 1935 efforts of Dr. George Counts are rather late in claiming that their only interest was promotion of friendship with Russia and that they have no interest in education for communism.

MOSCOW UNIVERSITY SUMMER SESSION

(Anglo-American Section)

1935

American Advisory Organization

INSTITUTE OF INTERNATIONAL EDUCATION, INC.
Advisors: GEORGE S. COUNTS and HEBER HARPER

NATIONAL ADVISORY COUNCIL

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HARRY WOODBURN CHASE, Chancellor of New York University.
GEORGE S. COUNTS, Professor of Education, Teachers College, Columbia University.
JOHN DEWEY, Professor Emeritus of Philosophy, Columbia University.
STEPHEN DUGGAN, Director, Institute of International Education.
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H. W. TYLER, General Secretary, American Association of University Professors.
ERNEST H. WILKINS, President, Oberlin College.
JOHN W. WITHERS, Dean, School of Education, New York University.
THOMAS WOODY, Professor of History of Education, University of Pennsylvania.
HARVEY W. ZORBAUGH, Director, Clinic for the Social Adjustment of Gifted Children, New York University.

At Whose Expense?

The *Greensboro* (N. C.) *Daily News* noted recently, after the C. I. O. had lost an election at Mock, Judson, Voehringer, Inc., by a vote of 450 to 380:

The strike at Mock, Judson, Voehringer, Inc., cost the American Federation of Hosiery Workers, C. I. O., between \$60,000 and \$70,000, according to unofficial estimates given recently.

A later report places the loss to the workers and the union at \$250,000. The company estimated loss to workers at about \$20,000 a week and that a reasonable figure on the nine-week loss was approximately \$175,000.

John J. McCoy, second national vice-president of the A. F. H. W., set at \$73,000 the loss of the strike to the union.

While the C. I. O. did establish a commissary and give some food to the strikers, we doubt very much that the union spent even a third of the amount stated and it is certain that John J. McCoy and his assistants received their salaries and "expenses" in full.

The strike at Mock, Judson, Voehringer, Inc., was ill advised and was at the expense of the workers.

MILL NEWS

CONSTRUCTION. NEW EQUIPMENT. FINANCIAL REPORTS. CHARTERS. AWARDS. VILLAGE ACTIVITY. SALES AND PURCHASES

GREENSBORO, N. C.—Camp Herman, a 100-acre recreation area owned by Proximity Mfg. Co., will reopen June 18 to provide vacation periods for children of mill employees. The camp has 41 permanent buildings around a 15-acre lake and has served thousands of children in the past. During the war the camp was requisitioned by the Army and was used as a recreation spot by soldiers.

COLUMBIA, S. C.—The Capital City Plant of Pacific Mills, which has been used as a cotton and machinery warehouse for several years, is being put back into production. Installation of looms is proceeding while limited operation is started. Seventy-five additional workers will be used.

NEWBERRY, S. C.—Newberry Cotton Mills, one of the oldest steam plants in the South, recently converted to electric power. The big steam engine, which for 52 years had pulled the machinery for three departments of the mill, averaged running ten hours per day for 39 years and 16 hours daily the past 13 years.

CHARLOTTE, N. C.—Textron-Southern, Inc., recently sold its Chadwick Mill property on Draper and Lander Streets in this city to Wilkes-Barre (Pa.) Lace Mfg. Co. for approximately \$200,000. The plant's 12,800 spindles will be operated by the Wilkes-Barre concern, which also plans to install lace manufacturing machinery. Textron-Southern will transfer the 240 looms to another location.

JACKSON, MISS.—Sanders Industries, one of Mississippi's foremost textile manufacturers, reported recently tentative plans for a multi-million dollar plant at Clarksdale, Miss. The project is being held in abeyance pending availability of mill machinery.

LINCOLNTON, N. C.—Construction work on a new upholstery plant being erected by Earl Rhyne and Grier W. Whitesides is almost complete. It is hoped that the building, which is 75 by 120 feet, will be completed and machinery installed in time to begin operations next month.

GALAX, VA.—Burlington Mills Corp. of Greensboro, N. C., has received Civilian Production Administration approval to construct at a cost of \$143,000 a new plant here for the manufacture of dress and upholstery fabrics.

GAFFNEY, S. C.—Gaffney Mfg. Co. last month honored its veteran employees at two banquets and presented 180 with service pins. G. S. Melton, a machinist, is the oldest employee with the firm with a record of more than 50 years service.

RALEIGH, N. C.—Rollex Mfg. Co. has received a state charter with authorized capital stock of \$100,000 and subscribed stock of \$300 by L. R. Ippolito, Abraham Ettinger and Joseph Resteghini, all of Raleigh. The firm is authorized to manufacture all kinds of yarns and fabrics.

GOLDVILLE, S. C.—The \$2,000,000 expansion program at Joanna Textile Mills Co. is now in the final stages. A

four-story addition to the main plant, increasing manufacturing space by 80,000 square feet, has been completed and is now in use. A 24-family apartment building is nearing completion and is expected to be ready for occupancy about June 1. A new project, a large recreation building to cost about \$250,000, is expected to be under construction soon and will be used to carry on the primary functions of the Joanna Foundation.

CHARLOTTE, N. C.—Meacham Multiple Winding, which winds cotton yarn for the electrical trade, is now in the process of erecting machinery in the recently completed addition to the plant. The additional machinery will give a more varied capacity for specified winding.

PRATTVILLE, ALA.—Operations have been stopped at the Gurney Mfg. Co. knitting yarn mill. A strike prompted the management to close the plant.

TOCCOA, GA.—North Georgia Processing Co., which produces cotton thread for domestic use, recently completed a new plant which necessitated the addition of 300 new workers to the 1,200 already employed by the firm. The company also has a new office building under construction and plans have been drawn for a recreation building for company employees.

STATESVILLE, N. C.—The purchase of Statesville Cotton Mills by Burlington Mills Corp. of Greensboro, N. C., is provided for in an agreement which has been entered into by Milton Herman, C. A. Sykes and W. C. Sykes, representing the majority of Statesville common stock, and Burlington Mills Corp. The Statesville plant is engaged primarily in the production of jacquard fabrics and colored cotton yarns. Burlington expects to continue the sales yarn activities of Statesville but will co-ordinate the merchandising of jacquard fabrics with its decorative fabrics division. It was pointed out that the present local management of Statesville Cotton Mills will continue. While no official figures were released, it is estimated that the transfer would involve close to \$3,000,000 when all negotiations were consummated.

Cotton Group Makes Recommendations

If domestic consumption of cotton is to be increased, there must be some basic study of prices, distributive margins, retail practices, Federal and State regulations, and consumer preferences as well as scientific research aimed at finding new uses for cotton. This was one major conclusion reached in a research study by the National Cotton Advisory Committee created by the Agricultural Marketing Act of 1946. The research suggestions were prepared by the Cotton Advisory Committee with the idea that they might serve as a blueprint for new cotton research once Congress votes all or part of the 19 million dollars asked by President Truman to put the 1946 act into operation.

The committee recommended also that special emphasis should be placed on production research aimed at reducing costs, increasing cotton yields, farm mechanization, better

ginning, packaging, storage and raw cotton merchandising practices. It further suggested that a price and supply analyses program should be initiated.

South Carolina Cotton Group To Meet June 5-7

The Cotton Manufacturers Association of South Carolina will hold its annual convention June 5-7 at Charleston. Speakers scheduled for the event include Dr. William P. Jacobs of Charlotte, N. C., president of the American Cotton Manufacturers Association; Dr. Claudius T. Murchison of New York, president of the Cotton-Textile Institute; Senator Burnet R. Maybank of South Carolina, and J. Strom Thurmond, governor of South Carolina.

Textile Foundation Holds Annual Meeting

For the 18th consecutive time Franklin W. Hobbs was elected chairman of the board of directors of the Textile Foundation at the group's recent annual meeting in Washington, D. C. Other members of the board are Frank D. Cheney, treasurer, Donald Comer, Clinton P. Anderson and W. Averell Harriman. Edward T. Pickard is secretary and assistant treasurer.

Reports received at the meeting showed marked progress and achievement in the field of scientific research. During the year just ended Dr. John H. Dillon was appointed the foundation's director of research, and in the laboratories at Princeton he has under way four fundamental research jobs—mechanical properties of fibers; relaxation-birefringence studies, organic chemical studies of starch and cellulose structure, and sorption and swelling studies. In addition research projects administered by the foundation are in operation for the Army Quartermaster Corps and for the Signal Corps. Work on all of these projects is assigned to a dozen Textile Research Institute fellows, as well as to the full-time members of the foundation's staff. The research fellows spend part of their time in taking courses at the Princeton graduate school looking toward masters or doctors degrees.

In economic research the report completed early in 1946, *Post-War Prospects For American Textiles*, has attracted widespread attention and study. Growing out of this searching analysis two additional titles have been authorized for study. They are broadly described as "The National Agricultural Policy With Respect to Cotton" and "Trends In Textile Distribution With Particular Attention to Vertical Integration."

In order to provide a more effective and useful method of getting research material into the hands of those who should use it, the board voted to establish a textile research information service which will have its headquarters in the Princeton laboratories of the foundation. It is aimed to perform this service jointly with the Textile Research Institute.

Curtail Aid For Foreign Cotton Deals

Activities of the Export-Import Bank have been extended five years beyond its 1948 expiration date and William McChesney Martin, president, told South Carolina Senator Burnet R. Maybank of the banking and currency committee that the bank would not finance any imports of competitive foreign textiles by the United States nor help any American firms to deal in foreign cotton.

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PERSONAL NEWS

Abbot Stevens of J. P. Stevens & Co., Inc., was elected a vice-president of the National Association of Wool Manufacturers at the group's annual meeting in New York City April 22. Among newly-elected directors are W. V. E. Terhune of Virginia Woolen Co., Winchester, Va., John L. Hutcheson, Jr., of Peerless Woolen Mills, Inc., Rossville, Ga., and E. Dean Walen of Pacific Mills. All other officials were re-elected.

Recent appointments by American Yarn and Processing Co., Mount Holly, N. C., include that of E. H. McGagnus to assistant superintendent of the Dixon Plant in Gastonia, N. C.; R. D. Haynes to overseer of the carding department; and Harry F. Jenkins to overseer at the Madora Plant.

J. W. Greene, who has been personnel manager of Hartsville (S. C.) Cotton Mills, has been transferred to Monarch Mills, Union, S. C. Mr. Greene will be with the personnel department at Monarch, and Frank C. Vest, who has been with that department, will open a new phase of that work for Monarch.

Daniel S. Dinsmoor, vice-president of Monsanto Chemical Co., St. Louis, Mo., and general manager of the firm's Merrimac Division, Everett, Mass., has resigned to enter the chemical consulting profession. Josiah B. Rutter has succeeded him as division general manager. . . . F. A. Abbiati, general manager of sales for Monsanto's plastics division, with headquarters in Springfield, Mass., has been named assistant general manager of the division. He will be succeeded as general manager of sales by James R. Turnbull, formerly assistant general manager of sales. Mr. Turnbull will be succeeded by Charles Lichtenberg. . . . Other Monsanto changes involve Robert K. Mueller, manager of East Plant, who becomes assistant production manager; Kenneth M. Irey, manager of West Plant, who becomes manager of both East and West plants; and W. T. Dickens, who becomes assistant manager at both plants.

Promotions, appointments to newly-created positions and managerial changes in the sales organization have been announced by E. I. du Pont de Nemours & Co. . . . James Lewis Petrie, chief clerk of the Grasselli Department in Charlotte, N. C., has been promoted to chief clerk of the same department in the company's Wilmington, Del., office. He has been succeeded by John Wurster, transferred from the Cincinnati, Ohio, office. . . . Edgar A. Thronson has been appointed assistant director of the technical division of the electrochemicals

department. He has been a special assistant to D. O. Notman, director of the division, since Dec. 1, 1946, and has been with Du Pont since 1929. . . . George S. Demme, assistant director of sales, has been placed in charge of nylon yarn sales and technical service, and Frank H. Coker, formerly assistant director of sales of the rayon division, has joined the nylon division as assistant director of sales in charge of nylon yarn sales development and promotion. . . . Philip F. Brown, assistant director of sales in charge of yarn, has been appointed assistant director of sales covering all activities; F. F. Hubach, manager of the Charlotte, N. C., district office, has been transferred to Philadelphia, Pa., as district office manager, and D. L. Lewis, Jr., present manager at Philadelphia, becomes Charlotte manager.



R. W. Angstadt, left, who has been associated with the textile resin department of American Cyanamid Co. since 1945 as a chemical engineer, has been appointed Southern sales manager of the department. Mr. Angstadt, who has had 24 years of experience in the textile finishing field, did intensive research work with chemical applications for shrinkage control of woollens while in the textile resin department. He formerly was associated with National Silk Dyeing Co. and Dominion Silk Dyeing and Finishing Co. in various supervisory capacities and was for 18 years superintendent of the Dominion plant at Drummondville, Quebec.

Alan B. Sibley, vice-president and treasurer of Judson Mills, Greenville, S. C., has been elected president of Greenville Rotary Club.

G. G. Cromer has been appointed executive vice-president of Textron-Southern Inc., Charlotte, N. C., a subsidiary of Textron, Inc. Mr. Cromer was vice-president of Chadwick-Hoskins, Charlotte, prior to its purchase last year by Textron.

Stanley A. Black, superintendent of the Granby Plant of Pacific Mills in Columbia, S. C., has resigned to become general manager of the Monarch group of Deering-Milliken Co. at Union, S. C. He has been succeeded by Thomas E. Lawson as superintendent at the Granby Plant.

James Collier has been appointed director of men's and boys' activities for the Joanna Foundation in Goldville, S. C. In this ca-

capacity he will act as general assistant to Clayton L. Perreault, executive director of the foundation.

Frederick G. Hughes has retired as general manager of the New Departure Division and vice-president of General Motors.

William J. Bailey, president and treasurer of Clinton (S. C.) Cotton Mills and Lydia Cotton Mills, Clinton, has been named citizen of the year by the Clinton Lions Club.

Ross Whitman, formerly director of product research for Kendall Mills, a division of the Kendall Co., has been appointed assistant director of research for Raymond Laboratories, Inc., St. Paul, Minn. Mr. Whitman will be responsible for the product development phases of research there.

H. L. Callender has been elected treasurer of Corn Products Refining Co. With the company since 1915, Mr. Callender has been assistant treasurer since 1943.

Recently elected directors of United States Testing Co., Inc., are D. G. Brewster of Oscar Heineman Corp., Chicago, Ill.; William Fraser of J. P. Stevens & Co., Inc., New York City; James A. Linen of *Time Magazine*; and H. O. Thayer of E. I. du Pont de Nemours & Co., Wilmington, Del. At a recent directors' meeting D. E. Douthy was elected chairman of the board, and A. L. Brassell was named to succeed him as president. W. H. Hubbard is vice-president, and S. B. Walker is secretary-treasurer.

OBITUARY

Joseph L. Sherrill, 62, superintendent of Spencer Mountain Mills, Ranlo, N. C., died April 23 at his home in Gastonia, N. C. He had been associated with Spencer Mountain Mills for the past 25 years.

Albert R. Tebo, 60, assistant secretary of Lane Cotton Mills Co., New Orleans, La., died April 23. He was a former president of the Association of Commerce. He is survived by a daughter and three sons.

Walter James Britton, Sr., 83, retired textile executive of Spartanburg, S. C., died May 4. Prior to retirement Mr. Britton was superintendent of Whitney Mills five years and at Spartan Mills 40 years. He served as advisor on operations for 15 years at Laurens (S. C.) Cotton Mills.

Arthur C. Goodwin, 62, purchasing agent for Proximity Mfg. Co., Greensboro, N. C., for the past 14 years, died April 25. He is survived by his wife and two sons.

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EQUIPMENT — SUPPLIES — LITERATURE

New Nylon-Covered Dobby Cords Announced

Danielson (Conn.) Mfg. Co. announces Ny-Cords—dobby cords consisting of an airplane steel cable encased in molded nylon. The nylon covering is impervious to oil and moisture and strong—stronger, in fact, than the steel cable itself. The nylon covering can carry the load itself after the steel cable has failed through fatigue. Exhaustive tests on this new doobby cord, stressing particularly its ability to take flexing, are said to prove its life to be substantially longer than cotton-covered cord. Ny-Cords are made up with Danco patented eye construction in which there are no eye threads to pull out of the cord—no loosening of ferrules. The full swivel eye is anchored in the ferrule tip which itself is locked to the cord end. The company also is prepared to furnish Ny-Cord in bulk for general mill use wherever cotton cord is employed.

Pennsalt Prices Increase Only 11.3 Per Cent

John W. Snyder, secretary of the United States Treasury, reported April 23 that Pennsylvania Salt Mfg. Co. was co-operating with President Truman's drive to stabilize American economy by holding down its prices and reducing prices for two of its products. Mr. Snyder released a letter from Leonard T. Beale, Pennsalt president, which pointed out that in accordance with established policy to encourage productive economy, Pennsylvania Salt Mfg. Co. has held its prices to an average price increase of 11.3 per cent since January, 1941. This increase compares with an increase of 31.7 per cent in all chemical prices, and an increase of 75.1 per cent in all commodity prices, for the same six-year period, according to Bureau of Labor Statistics indices.

In addition, to co-operate with President Truman's program, Pennsalt, manufacturer of chemicals used in numerous industries, announced to its

industrial consumers that it is reducing prices of two of its chemicals, chloride of lime and anhydrous ferric chloride, by \$5 a ton, effective May 1. Chloride of lime, or bleaching powder, is a chemical used in such consumer items as textiles, soap, bactericides, deodorants and disinfectants and in laundry products. Anhydrous ferric chloride is used as a catalyst in making many organic chemicals, petroleum products, glass, ceramics and textiles. "The reductions are being made," said Mr. Beale, "to contribute to lowering the prices which the public will pay for a wide variety of finished products. We wish to inform that it has always been a policy of Pennsylvania Salt Mfg. Co. to hold prices as low as possible. We will continue to throw our weight on the side of holding prices down."

Behr-Manning Offers New Flock-Finishing Booklet

Just released by Behr-Manning, Troy, N. Y., manufacturer of cut-to-length rayon flock, is a new ten-page booklet on *Flock and Flock Finishing*. Containing 24 sample color swatches in addition to its text matter, the new booklet describes the adhesives, methods of applying adhesives and flock on various surfaces, outlines the company's engineering service and lists the numerous decorative and functional uses for flock. Behr-Manning flock, described in the booklet, is the result of over ten years of research in the manufacture and coating of flock in the company's electro-textile division. The product, a precision cut-to-length rayon flock, is said to be free-flowing, and covers readily to yield a dense, uniform, velvet-like finish of unusually fine decorative and functional properties. The booklet is free to present or prospective flock users. Write to Behr-Manning, Troy, N. Y.

Southern Knotwood Apron Operating In Charlotte

Emmons Loom Harness Co. announces the formation of a new firm,

Southern Knotwood Apron Co., which will manufacture, sell and service Knotwood metallic feed aprons from the plant at Charlotte, N. C. All inquiries concerning the feeder aprons should be addressed to Southern Knotwood Apron Co., P. O. Box 2063, Charlotte, N. C.

V-Belt Friction Drive Clutch Is Developed

A new V-belt friction drive clutch is announced by V-Belt Clutch Co., 3757 Wilshire Boulevard, Los Angeles 5, Cal. Designed to grip or release directly on V-belts, the Ball-lok clutch units, complete in themselves, may be used either as driving or driven pulleys. In operation, the positive, smooth clutching action is the grip of the side-walls of the pulley against the belt. When the clutch is opened, the belt slackens and idles on a free-running, grease sealed, ball bearing, with no attendant belt drag or creep.

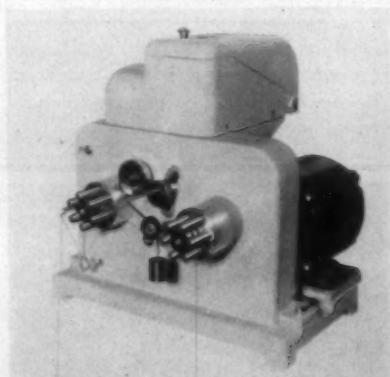
One fixed flange of the V-belt sheave is an integrally attached part of the hub and the inner race of the sealed ball bearing belt idler. Four free-rolling steel balls ride in grooves in the hub and carry all turning and locking forces. The balls are carried forward by the sliding clutch sleeve or movable flange and drop into pockets at the ends of their grooves. The cam sleeve then moves over the clutch sleeve and locks the clutch against the balls in driving or driven position. All parts turn with the shaft. The engaging action which grips the belt and at the same time forces it away from the idler bearing and into working position is found to be smooth and shockless in load pick-up. A stop ring prevents over-travel of the cam sleeve in disengaging action. The cam sleeve carries a projected flange on which a shift collar is mounted, in its turn actuated by a shifting fork.

Four sizes in the present line have $3\frac{1}{4}$ to five-inch sheave diameter, and are $2\frac{1}{8}$ to $3\frac{1}{16}$ inches in over-all length. Two may be applied to three-quarter-inch shafts; two to one-inch shafts;

weights range from 44 to 54 ounces. They may be secured with bronze collar and shifting fork, or with open channel cam sleeve. Heavier duty multi-belt units will soon be available with 4½-inch pulleys and with bores up to 1⅜ inches.

Lawson Products Announces New Rubber Thread Tester

Lawson Products, Inc., 486 Pawtucket Avenue, Pawtucket, R. I., announced recently the availability of a new continuous tester for determining elasticity and strength of rubber thread. The Lawson tester (as shown) tests the whole spool of either rubber thread or ribbon, or any part of the package. It determines whether the spool can be processed at the required stretch without breaking, and notes the strength of the thread and its variations at that stretch. After being stretched the thread still can be used, if the test was satisfactory, or rejected before, it causes trouble.



The tester is described as an accurate instrument, carefully made and simple in operation. It is not intended to replace other types of testers which determine maximum values, but is designed to predetermine the suitability of the thread for use.

Metron Offers Type 25D Linear Speed Hand Meter

Metron Instrument Co., 432 Lincoln Street, Denver, Col., makes known the availability of its new Type 25D linear speed hand meter for measuring speed of travel. The meter is said to provide an accuracy of one per cent, is direct reading and calibrated in either feet or yards per minute. It is produced in a wide selection of ranges from three to 3,000 yards per minute or ten to 10,000 feet per minute. Contact to the moving member is made with a re-

placeable free running disc one foot in circumference (3⅞ inches in diameter) which is solidly clamped on the rotating shaft of the head. The contact surface of the disc is oil resistant synthetic rubber which has a high coefficient of friction and good wear properties. Lubrication of the head is permanent for long life and the instrument is rugged electric type with no flexible shafts, centrifugal mechanism or other components to wear out.

Antoxol, A Flameproofing Compound For Textiles

Antoxol, a new flameproofing compound for textile materials, is being manufactured by Eronel Industries, 5714 West Pico Boulevard, Los Angeles, Cal. The manufacturer claims that Antoxol, being a balsamic resinous organic compound, will not powder off, thus assuring permanent flameproofing. Eronel states that it will not alter color, appearance, feel or sheen of the most delicate fabrics. It is resistant to repeated dry cleaning with all common agents. It is adaptable to all fabrics except Celanese rayon.

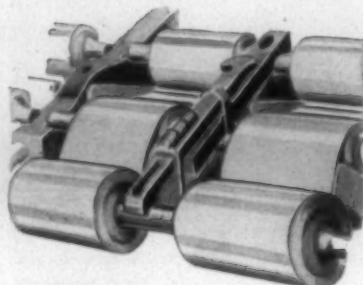
Directory Of Mexican Industrial Companies

Publicaciones Rolland, S. de R. L., Plaza de la Republica No. 6 (407), Mexico, D. F., announces the first industrial directory ever printed in Mexico, sponsored by the Confederation of Industrial Chambers of Mexico. Included in its 1,024 pages is a list of all Mexican industrial firms, their addresses, names of officials, number of workers, raw materials used, products manufactured and capitalization. So that buyers in the United States will be able to utilize it, the directory contains a special Spanish-English dictionary covering most of the words in the publication.

Cyanamid To Refinance For Expansion Program

W. B. Bell, president of American Cyanamid Co., announced April 30 that the board of directors is recommending to the stockholders a plan for financing which involves changes in the capital structure of the company. The plan contemplates securing additional capital to be used with other funds for carrying out a program of expanding facilities for producing existing and new products in the fields of pharmaceuticals, dyestuffs, pigments,

If Your Rolls Are Running a Race



YOU Are the Sure Loser!

Worn saddles drag on the top spinning roll slowing it down and wearing the neck of the roll. Then your top and bottom rolls revolve at different speeds with resulting unevenness in your yarn. The unequal race that replaces the smooth teamwork of the rolls results in a loss for you.

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LUBRICATING SADDLES

plastics, and other chemicals; for additional investments in Jefferson Chemical Co., Inc. (jointly owned with the Texas Co.), and Southern Alkali Corp. (jointly owned with Pittsburgh Plate Glass Co.), to be used in their plant construction programs; and for working capital incidental to additional sales volume.

Sound Console Combines Voice-Paging And Music

Especially designed to afford plants and large offices with complete voice-paging facilities as well as music at work, Executone's new, multi-purpose console, model P-20, contains in a single cabinet of selected mahogany veneer, all the central control elements needed in a sound system requiring up to 50 watts. Power output can be substantially increased through the addition in remote departments of any number of Executone 50-watt district amplifiers. While completely functional, this new console is of attractive design, harmonizing easily with any type of office or factory furniture or equipment. Thus, model P-20 eliminates the need for tall, unsightly metal rack and

panel housings. Any number of microphones with their associated controls located in separated departments can be used with this console to comprise a completely automatic, thoroughly integrated sound system.

Executone's exclusive one - button control feature permits the user, who may be at any microphone location, to issue a voice message by merely pressing one button. All other microphone control stations are automatically given notice by a busy signal lamp. Any music program in process is automatically cut off for the duration of the paging message. Thus, paging calls can be made at any time without approaching the console which may be on a different floor or at some other distant location.

Model P-20 contains a newly designed 50-watt amplifier, type P-12, which has individualized bass and treble tone controls for paging and music. These controls permit reproduction of music with full bass response along with clear, crisp, penetrating voice-paging. The amplifier also contains an exclusive constant voltage circuit which maintains equal volume regardless of the number of the speakers in the sys-

tem which are turned off or on. It also has a new automatic plate voltage control which not only disconnects plate voltage during idle periods, but also reduces filament voltage by 25 per cent, thereby extending tube-life.

The model P-20 console also contains an intermix automatic record changer which handles recordings of either ten or 12-inch size in any sequence and turns itself off after the last record is played, simultaneously disconnecting plate voltage in the amplifier. A special channel control with all-page feature is provided.

The console also contains a monitor speaker with four-step volume control. The outside dimensions of the P-20 are 26 $\frac{1}{4}$ inches wide, 17 $\frac{1}{8}$ inches deep and 40 $\frac{1}{8}$ inches high. Model P-20 is made by Executone, Inc., 415 Lexington Avenue, New York 17, N. Y.

Carolina Bearings Co. Formed In Greenville

A charter has been issued by the State of South Carolina to Carolina Bearings Co. of Greenville, which will do a wholesale and retail business in all types and makes of bearings, power transmission devices, bushings, etc., used in textile and other industrial equipment.

Hercules Powder Opens New Jersey Resins Plant

A modern new Hercules Powder Co. plant, for the manufacture of chemicals for the paint, varnish, lacquers, adhesives, and other industries, was officially opened at Burlington, N. J., April 30 by Dr. W. M. Billing, general manager of Hercules' synthetics department. The first unit of the plant to be brought into production was the one for the manufacture of Pentaerythritol resins for protective coatings. Subsequently, units for the manufacture of liquid resins, rosin esters, and hydroabietyl alcohol, will be in operation. The plant is expected to be in full production the later part of this summer. Construction of the plant was begun shortly after V-J Day when it became evident that the demand for various Hercules synthetic resins would exceed existing production facilities. The plant incorporates the most modern resin manufacturing techniques and equipment.

The Pentalyn resins, pioneered by Hercules, are used in paints, varnishes, adhesives, printing inks, wax polishing

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compounds, and in the manufacture of rubber. The liquid resins, such as Herculyn and Abalyn, are used in the manufacture of paint, varnish, lacquer, adhesives, linoleum and floor coverings, paper, plastics and textiles. The rosin esters are used in the manufacture of paint, varnish, lacquer, industrial textile coatings and sizings, paper coatings, adhesives and plastics. Hydroabietyl alcohol, a resin alcohol, is a new chemical with promising properties. It is used in the manufacture of synthetic resins and offers many possibilities in other applications such as protective coatings, plastics and textile finishes. The Burlington plant is the fifth synthetics department plant to be brought into production. Others are located at Brunswick, Ga., Hattiesburg, Miss., Wilmington, Del., and Mansfield, Mass.

Cloverleaf-Freeland Corp. Formed By Two Firms

Clover Leaf Mfg. Co. of Honesdale, Pa., and Freeland Spool and Bobbin Corp. have been consolidated. The consolidation became effective May 1. This combination will result in one of the largest manufacturers of spools, bobbins and accessories for the processing of silk, rayon and nylon yarns in the country, according to an announcement by the new firm. The executive offices will be in Hazleton, Pa.; sales offices and purchasing will be located in Honesdale.

The new company plans first of all to speed up deliveries as well as bring about lower prices on its products, meanwhile maintaining its present standards of quality. This will be brought about by streamlining its two plants and by pooling together the experience and workmanship.

Calco Technical Bulletin Covers Wool pH Control

Chemists and dyers will be interested in the recent announcement by the Calco Chemical Division, American Cyanamid Co., Bound Brook, N. J., that the new Calco Technical Bulletin No. 778, *Importance of pH Control in Wool Processing*, has been made available for distribution. Much interest has been created with the publication of many articles on this subject in recent years. The importance of the adjustment of pH of wool fabrics, yarn or raw stock prior to dyeing is now recognized. A copy of the new Calco tech-



WE are an old, established firm—but last month we changed our name. Formerly the Pioneer Atlanta Company, Inc., we are now the **PIONEER HEDDLE AND REED COMPANY, INC., OF ATLANTA**—People apparently like our new name. It describes our product—and, incidentally, we are the only southern manufacturer of heddles. We are gratified at the sincere acceptance our new name has found; we feel justified now in having made the change—a change in name only, a change that in no wise will affect our corporate structure, ownership or personnel.

As always we will continue to strive for a higher degree of efficiency in our service and improved quality of our products.

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nical bulletin may be obtained from Calco representatives by writing the Advertising Department, Calco Chemical Division, American Cyanamid Co., Bound Brook, N. J.

Cotton Council Has New Factual Handbook

Discovering Cotton is a 44-page, two-color "handbook of cotton facts which will be found useful in merchandising and distributing cotton products, in preparing advertisements, and in selling to retail customers." Compiled by the National Cotton Council, this handbook contains a wealth of factual information based on scientific investigation. A total of 18 fiber and fabric characteristics of major importance are discussed, with cotton's relative position in comparison with other fibers being studied in conjunction with each characteristic.

Certainly the department store advertising executive will find much of value in this booklet which may be included in advertisements of cotton products. Certainly retail selling personnel will find it refreshing to be able to tell the customers the "whys and wherefores" about cotton. No at-

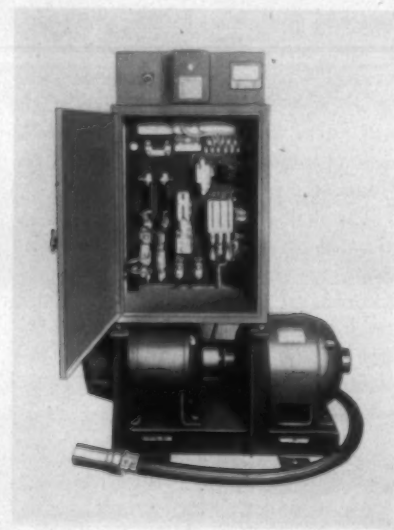
tempt has been made by the authors to dress up cotton's position. The facts have been simply and logically arranged. For example the section of the handbook dealing with wearing quality points out: "Laboratory abrasion tests, as well as field tests, show cotton to have many times the abrasion resistance of wool, silk or rayons. This characteristic is particularly important in children's garments, men's shirts, everyday dresses, and all outer garments where serviceability is a major consideration. In recommending cotton for work clothes, the U. S. Department of Agriculture reported that among the various types of cotton fabrics, the gabardines, drills and whipcords are especially resistant."

Again, in the discussion of the heat resistance of various fibers and fabrics, the study simply states that "Cotton has excellent resistance to the heat encountered in general service. Cotton fabrics and garments usually are washed at 180° F. to 200° F., dried at temperatures ranging from 200° F. to 250° F., and pressed with a 400° iron. The boiling of cotton garments and household fabrics is still a routine weekly practice with tens of thousands of families. Cotton garments can be


ironed with the assurance that they will hold their shape, as cotton does not melt, shrink, or stretch when ironed." Among the qualities covered, other than wearing quality and heat resistance, are launderability, color-fastness, pliancy, strength, perspiration resistance, permeability, absorbency, warmth, coolness, shrinkage, stretch, flame-resistance, water repellency, mildew resistance, insulating properties and versatility. Copies may be obtained without cost from the National Cotton Council, P. O. Box 18, Memphis 1, Tenn.

General Electric Announces Battery-Charging Unit

Improved heavy-duty battery charging equipment for industrial truck service has been announced by General Electric Co. The equipment is packaged into one unit consisting of a single-circuit battery-charging motor-generator set, with its control cabinet mounted on a welded structural steel framework directly above. It is completely wired and assembled before shipment from the factory. (See illustration.)



The equipment meets the requirements of an 18-cell, 550-ampere hour, lead acid type storage battery. It charges the battery at the exact tapered charge rate that is indicated by the battery manufacturer as being necessary for longest life of the battery equipment. The generator is a conventional 47-volt d.c. machine. For exact adjustment of voltage, a slide-wire type resistor is used in the field circuit in place of the usual rheostat. This prevents tampering with the voltage after it has



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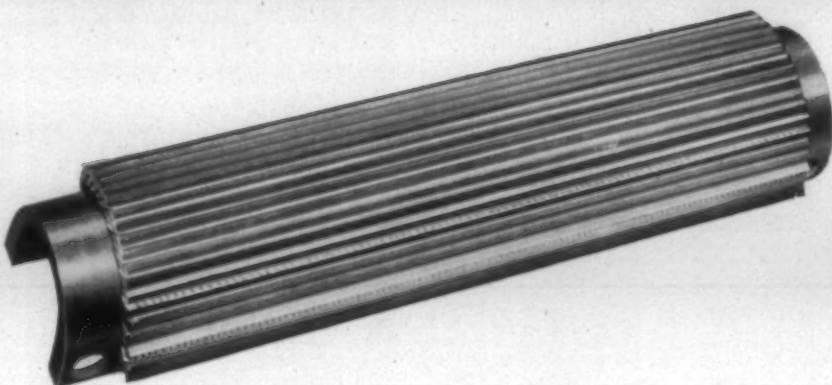
been set. All the control devices are heavy duty type, the line contactor being of steel mill construction, and the motor starter a size two across-the-line type. The equipment is completely automatic. Connection of the battery to the terminals automatically starts the motor-generator set, and when it has attained synchronous speed the line contactor to the battery circuit is closed automatically. As soon as the battery has reached a voltage representing 75 to 80 per cent of full charge, a timing device is actuated which cuts off the battery from the charging circuit on completion of the charge. This shuts down the motor-generator set and prevents overcharging the battery.

Viscose Brochure Describes Consumer Service Program

Thousands of retail customers all over the country are continuously receiving accurate, up-to-date information on the buying, care and use of rayon, according to a new brochure which has just been released by American Viscose Corp., producers of Avisco rayon yarn. The brochure, entitled *Building Consumer Preference for Rayon*, is being sent to all American Viscose trade outlets to acquaint them with the company's broad consumer service program. Stating in the brochure's preface that the purpose of this program is to maintain an expanding consumer market for rayon, the company points out that all retailers, manufacturers and distributors of rayon merchandise benefit from the activity. With the entire program based on the fundamental principle that a satisfied customer is a *repeat* customer, the company explains that all information released is geared to help women get maximum satisfaction from rayon by knowing how to buy and care for it properly.

An estimated 1,500 radio broadcasts and 22,000 newspaper articles in 1946 told the rayon buying and care story to general consumers, according to the brochure. Pertinent facts on rayon care, sewing and wardrobe planning are released to these media each month through the A. V. C. educational news service. According to the company, a series of informative leaflets on rayon forms the basis of the entire consumer service program; 12,000,000 copies of these leaflets were distributed upon request during 1946. Many stores are using these leaflets for customer service and employee training.

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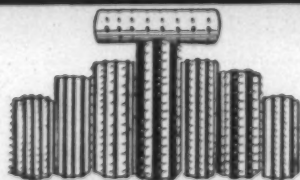
Average Cost, Erected: \$1.85 sq. ft., Including 5" Concrete floor.

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tendent of large weaving room. Now employed as
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POSITION WANTED as overseer carding; prefer
first shift. Now employed but wish to make
change. Graduate of I. C. S.; also Vocational
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perience as overseer on cotton, carded and combed
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tration labor, contracts in textiles and related
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ployed. Address "Alabama," care Textile Bulle-
tin, P. O. Box 1225, Charlotte 1, N. C.

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Spinner. Employed small mill; would consider
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ciency strength production desired. Interview and
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Wire or write full details.

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Production Manager for medium size fine combed yarn mill. Must be capable carder and spinner, and good organizer. Advise past experience.

Write "Fine Yarn," care Textile Bulletin,
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Loom Fixers experienced on C. & K. Automatic S-5 and S-6 Looms for Central Pennsylvania Mill. Address all replies in writing to:

"Central," care Textile Bulletin,
P. O. Box 1225, Charlotte 1, N. C.

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Greenville Belting Co.	42
Guardian Chemical Co.	35
Hartness Co., Scott H.	42
Houghton Wool Co., The	35

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Overseer carding or night assistant superintendent; 20 years as overseer; I. C. S. course; 40 years in card room; 53 years old, married. Can furnish best of references. Prefer Alabama, Mississippi or Georgia.

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Complete spinning plant, wool worsted from 500 spindles upwards. Good condition. Also cone winders required.

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Todd-Long Picker Apron Co.	48
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Regional Cotton Research Plan Discussed

Plans to institute an 11-state regional program of cotton research were discussed recently at a working conference of cotton researchers held in New Orleans. A sum of \$100,000 has been allotted under the Flanagan-Hope Act for the development of a technical cotton research program in the Southern states and the individual states will supplement the Federal appropriation with assistance amounting to many times the original allotment, it was revealed. The purpose of the program is to set up the machinery to study the cotton plant and discovering means of improving fiber and combatting diseases of cotton. States included in the plans are Louisiana, North Carolina, Georgia, Texas, Tennessee, Alabama, New Mexico, Mississippi, Arizona, Oklahoma and Arkansas.

Some Comparisons Of Mill Lighting Fixtures

(Continued from Page 28) calculations, let's sum up and see how many fixtures are required for this mill:

Warp card room	165 fixtures
Filling card room	137 fixtures
Warp spinning room	208 fixtures
Filling spinning room	200 fixtures
Spooler room	33 fixtures
New weave room	248 fixtures
Old weave room	248 fixtures
Cloth room	60 fixtures

Total 1,299 fixtures

Calculations For Double-40 Fixtures

For a comparison, let's work out the calculations for this same mill, using the double-40 fluorescent fixtures, and basing our light output on the same 4,500° white color of this light.

Warp Card Rooms: 30,000 square feet at approximately 22-23 foot-candles, area per fixture, 100 square feet:

$$\frac{30,000}{100} = 300 \text{ fixtures.}$$

Filling Card Rooms: 25,000 square feet of area, at approximately 22-23 foot-candles, area per fixture, 100 square feet:

$$\frac{25,000}{100} = 250 \text{ fixtures.}$$

Warp Spinning Room: 30,000 square feet of area, at approximately 27 foot-candles intensity, area per fixture 81 square feet:

$$\frac{30,000}{81} = 373.3 \text{ or } 373 \text{ fixtures.}$$

Filling Spinning Room: 28,750 square feet of area, at approximately 27 foot-candles intensity, area per fixture 81 square feet:

$$\frac{28,750}{81} = 354\text{-plus or } 355 \text{ fixtures.}$$

Spooler Room: 4,000 square feet of area, at approximately 34 foot-candles intensity, area per fixture 64 square feet:

$$\frac{4,000}{64} = 62.5 \text{ or } 63 \text{ fixtures.}$$

New Weave Room: 30,000 square feet of area, at approximately 34 foot-candles intensity, area per fixture 64 square feet:

$$\frac{30,000}{64} = 468\text{-plus or } 469 \text{ fixtures.}$$

Old Weave Room: 30,000 square feet of area, at approximately 34 foot-candles intensity, area per fixture 64 square feet:

$$\frac{30,000}{64} = 468\text{-plus or } 469 \text{ fixtures.}$$

Cloth Room: 7,200 square feet of area at approximately 34 foot-candles intensity, area per fixture 64 square feet:

$$\frac{7,200}{64} = 112 \text{ fixtures.}$$

Now, having made our calculations just as before, let's

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sum up and see how many double-40 fixtures would be requires to do the same job:

Warp card room	300 fixtures
Filling card room	250 fixtures
Warp spinning room	373 fixtures
Filling spinning room	355 fixtures
Spooler room	63 fixtures
New weave room	469 fixtures
Old weave room	469 fixtures
Cloth room	112 fixtures

Total 2,391 fixtures

From the above tabulations we see that if we use double-40 fixtures, we will need 2,391 fixtures, which will in turn have 4,782 tubes and 4,782 starters to maintain. Whereas, if we use the double-100 fixtures, we will need only 1,299 fixtures, having 2,598 tubes and 2,598 starters to maintain.

Too, these larger tubes and starters give far more satisfactory service and consequently less trouble than the smaller ones for the double-40 units. Another fact which might be of interest to you is the *first cost* of these fixtures. You'd be surprised if you'd check up on comparative prices in your section on both of these fixture sizes. Still another fact that comes right home to so many of you who make your own installations is the cost of installation. You might check up on this. In the next issue we will work up a list of material for comparative installations of the double-100 and the double-40 fixtures.

Materials Handling In The Textile Industry

(Continued from Page 27) around the mill which we could talk about such as those in both raw stock and package yarn dyeing plants. Overhead cranes and hoists, either hand or electric powered, are a common method of handling here, although there are many unique ways of accomplishing things in one plant over another.

It is an old adage that "Necessity is the mother of invention." It is true that in normal times we are blessed with ample raw materials, as well as labor, and it is possible that we may have a tendency to be wasteful with just that which makes us a rich and powerful country. Perhaps some relief from this wastefulness may be obtained by the application of "better-methods" approach which translates operating costs, investments and technical considerations to "how-to-do-it" into language that we can all understand. We want to know *why* and *how* more productivity will result and *why* and *how* new methods will save costs. When we begin to study each and every operation with these thoughts in mind, we will reach a higher degree of efficiency throughout our plants.

A new and inexpensive treatment to make wool moth-proof was reported last month at the annual meeting of the American Chemical Society in Atlantic City, N. J., by Dr. Milton Harris and Arnold Sookne of the Harris Research Laboratories, Washington. The chemists revealed that by changing the basic chemical structure of wool, textiles are produced of "enhanced resistance to attack by biological agents, such as moths and fungi, and to chemical agents, such as alkalies and oxidizing and reducing agents." The new process may have far-reaching effects on the wool industry, they added, since many commercial wool processes such as scouring, stripping, bleaching and vat dyeing involve chemicals which have more or less deleterious effects.

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CORRESPONDENCE INVITED

List Speakers For National Textile Seminar

Approximately 200 of the top textile leaders of the nation will gather at Shawnee-On-Delaware, near Stroudsburg, Pa., May 12, for a week of study and discussion of the problems facing the industry. The occasion will be the second National Textile Seminar sponsored by the Philadelphia Textile Institute. New Developments in the industry, including the results of recent research, will be made public. Each of the seminar topics will be discussed by an acknowledged leader in the field whose talk will be followed by a question and answer period, with no holds barred.

A highlight of the seminar will be a discussion on the evening of May 15 of "Some Aspects of Industrial Relations," by Lewis B. Schwellenbach, Secretary, U. S. Department of Labor.

The application of electronics to the textile industry will be discussed on the afternoon of May 16 by Dr. G. A. Brown, research engineer, Radio Corp. of America. Electronic instruments and controls now in use in the textile industry will be exhibited for the first time by the Brown Instrument Co., a subsidiary of the Minneapolis-Honeywell Regulator Co. Richard Pollock, Jr., textile industrial engineer of the Brown Instrument Co., also will speak during the session on "Electronics and the Textile Industry."

"New Fibers and Fabrics for Old," will be the subject of talks by two top research executives of the Monsanto Chemical Co., Dr. H. D. Powers and David Plumb on the afternoon of May 14. There also will be an exhibit of fabrics from new fibers arranged by the Philadelphia Textile Institute.

The question of verticalization in the industry will be debated pro and con by Royal Little, president of Textron, Inc., and J. Spears, National Mallison Fabrics Corp., on the evening of May 13.

"A Critique of Textile Education" will be given by Harold W. Whitcomb, divisional vice-president of Marshall Field and Co., and assistant general manager of Fieldcrest Mills, Spray, N. C., and William D. Fales, head of the Rhode Island School of Design, on the morning of May 15.

"Tops—As Related to the General Textile Industry," will be developed by N. A. Whiffen, officer-in-charge, Scientific Research Liaison Office, Australian Embassy, and Kenneth Marriner, general manager, Frances Willey and Co., Boston, on the morning of May 13.

"Knitting—In All Of Its Phases," will be discussed by

Ferdinand K. Thun, director and assistant secretary, Berkshire Knitting Mills, Reading, Pa., and Thomas Johnson, manager of the Aveco sales department of the American Viscose Corp. on the morning of May 14. "Waste Utilization" will be the topic of William H. Jones, vice-president of the Railway Supply and Mfg. Co. and B. H. Crawford, of the Southeastern Engineering Co., on the morning of May 16. The evening of May 12, opening day of the Seminar, will be given over to a discussion of "Styling for Men," led by O. E. Schoeffler, fashion editor of *Esquire*, and "Styling for Women," led by Miss Madeleine Darling, fashion editor of *Vogue*.

Dr. Milton Harris of Milton Harris Associates, Washington, D. C., will be seminar leader. Dean Richard S. Cox of the Philadelphia Textile Institute, will be general chairman of the seminar. The seminar committee includes: Marshall Cole, Alban Eavenson, T. B. Hayward, M. Earl Heard, Rinaldo A. Lukens, Carl Mattmann, E. L. Schlesinger and Dean Cox.

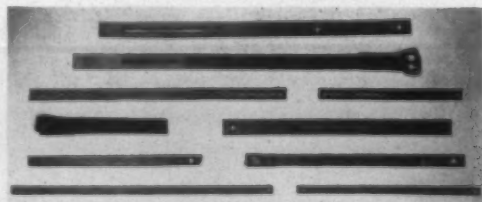
More Japanese Textiles Deemed Necessary

Allied headquarters officials in Japan announced recently that plans for increasing the number of operable spindles in Japan's cotton industry would present no immediate danger of any large-scale infringement upon interests of other textile areas. This statement was released in reply to Chinese and American sources who feel that the plan to increase the number of spindles to 4,000,000 from slightly more than 2,000,000 would drive other cotton-producing nations out of the world market. It was explained that the increase was necessary to meet internal Japanese demand, provide exchange for needed imports and help meet world demand for textiles. Even with 4,000,000 spindles operating, Japan would be able to produce only 27 per cent of her pre-war peak output of 945,000,000 pounds annually for export and a slightly smaller amount for domestic use, it was pointed out.

Sibley Addresses Textile Fraternity

Alan B. Sibley, treasurer of Judson Mills at Greenville, S. C., was the principal speaker when Iota chapter of Phi Psi, national honorary textile fraternity at Clemson College, held its 20th anniversary spring banquet in Greenville April 18. E. T. McIlwain, president, was in charge of the business session.

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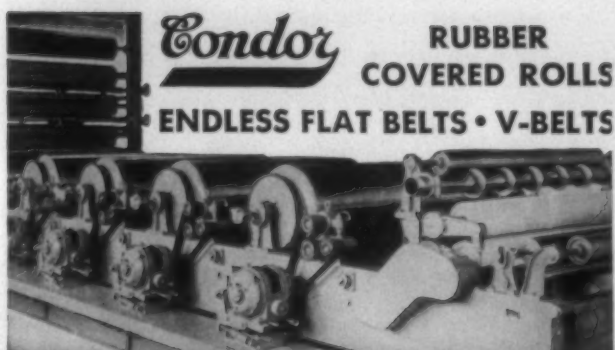
Says Trade Agreements Threaten Economy

The Reciprocal Trade Agreements Act and the proposed charter for the International Trade Organization provide the State Department with a mechanism to remake the domestic economy of the United States with the possibility of damage to important segments of the country. Dr. C. T. Murchison, president, Cotton-Textile Institute, declared April 23 at a hearing conducted in Washington by the House Ways and Means Committee.

The cotton textile industry, he said, does not know whether present tariff rates will afford adequate protection once foreign countries resume the manufacture of textiles on a large scale, and is strongly opposed to any further reduction in rates at this time. The differential between wages in cotton mills here and those abroad, he states, is continuing to widen and is already beyond the power of superior efficiency to offset. Also, he declared, American mills pay higher prices for cotton than competitors overseas due to the domestic price support program and the subsidy on export shipments of the raw fiber.

In connection with the I. T. O. charter, he declared, "Once the I. T. O. charter becomes a reality, additional tariff reductions will follow as a matter of course. Under the charter foreign countries are in a superior bargaining position. Press comments, both here and abroad, make it clear that the foreign countries will not adhere to the proposed charter and accept foreign interference in their domestic affairs, unless this country makes substantial reductions in its tariff. However, even if this country accedes to their requests, we have no assurance that they will continue to live up to the provisions of the charter because the charter itself provides so many exceptions to the rules laid down. Most of the reservations and exceptions are framed to deal with situations that would arise primarily in other countries and would provide them with an escape route whenever the charter operates against their national interests.

"The same advantage rests with them in the negotiation of future tariff reductions. According to Article 24, 'the binding or consolidation of low tariffs or of tariff-free treatment shall in principle be recognized as a concession equivalent in value to the substantial reduction of high tariffs or the elimination of tariff preferences.' To us this means that the State Department, in its eagerness to increase imports to the United States, stands ready now and in the future to reduce our tariffs provided other nations do not raise theirs. This would be consistent with the department's entire philosophy regarding the role which this country should play in international trade. It would also be consistent with the thinking of the Department of Commerce as expressed in its publication, *The United States in the World Economy*, in which it said: 'Both in the negotiation and in the appraisal of these (trade) agreements . . . emphasis might well be placed less on the concessions obtained from other countries and more on reductions effected by this country. If the record of the past proves anything, it is that other countries have consistently tended to purchase American goods and services in larger and more regular volume than the United States has bought of foreign goods and services and that the major handicap to exports has not been trade restrictions abroad so much as the underlying shortage of dollars.'"



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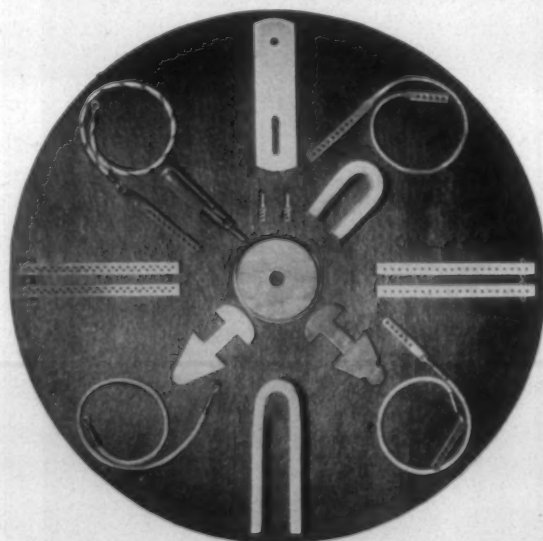
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North Carolinians Receive Patents

Patents pertaining to the textile industry recently were issued several North Carolinians. Howard Snow and Sara D. Pickard of Charlotte were issued a patent on surface finishing impregnated fabrics which was assigned to Southern Friction Materials Co. Patent No. 2,411,273 was granted to W. A. Kennedy of Charlotte and relates to means associated with a counter, preferably a pick counter on a loom so that if anyone tries to tamper with the counter to fraudulently change the number of picks actually registered by the counter during a shift, a cover will be thrown over a portion of the counter to indicate to the supervisor that the operator during that shift has fraudulently tampered with the counter.

Patent No. 2,412,506 was issued to Oren W. Greene, Robert W. Twitty and Therman L. Richie, all of Marion, and assigned to Marion Mfg. Co. of the same address. The patent covers the attaching to each of a plurality of feeders, a container which catches the fibers coming from the feeders and when a pre-determined poundage has passed from a feeder, the feeder is automatically stopped and this continues until all of the feeders have delivered their proper amount of fibers into their containers, at which time when the last feeder is stopped, all of the containers will be automatically emptied into a conveyor to convey the fibers to

another portion of the mill for blending and all of the feeders will be automatically started again.

Deadline Set For Alien Property Debt Claims

Attorney General Tom C. Clark has announced that June 1, 1947, has been set as the deadline for filing debt claims against persons whose property was seized as alien property during this war prior to Jan. 1, 1947. The action was taken by issuance and publication of Bar Order No. 1 in the Federal Register on March 1, 1947, by the Office of Alien Property, Department of Justice, pursuant to Public Law 671 of August 8, 1946, which amends the Trading with the Enemy Act.

The attorney general said that the claims of American creditors against enemy property seized before Jan. 1, 1947, can not be considered unless filed by June 1, 1947. Mr. Clark also stated that under the statute, unless persons who claim return of property seized by the government file claims before July 1, 1947, the property may be reduced by the payment of valid debts of the former owners. If title or lien claims are filed within 120 days of the publication of the bar date, the O. A. P. is not authorized to use the property for payment of debt claims.

Creditors of persons or firms whose property has been taken over by the U. S. Government under the Trading with the Enemy Act may file claims, the attorney general explained. The statute also provides generally, Mr. Clark continued, that claimants must be U. S. or Philippine citizens, or residents of the United States since Pearl Harbor. Claims also may be filed by corporations organized under Federal, state, territorial or Philippine law.

Donald C. Cook, director of the Office of Alien Property, indicated that approximately 6,000 debt claims have been received by the O. A. P. involving total claims of approximately \$120,000,000. The establishment of the deadline will permit the Office to process these claims as well as similar claims filed through June 1, 1947. Information about debtors and forms necessary for filing claims may be

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obtained from the Office of Alien Property, Department of Justice, Washington 25, D. C.

Testing Firm Notes Adjustments And Defects

The United States Testing Co., Inc., Hoboken, N. J., reveals that a large increase in adjustments and defects has been noted since the first of the year. The testing company has, for a number of years, conducted a service known as the impartial adjustment bureau. This service is conducted for department stores as an aid to the adjustment department in handling complaints. Merchandise which has been returned by customers is sent to the testing company in order to determine if the customer's complaint is justified. Department stores then have an impartial report to submit to the customers, or, if the material is defective, the report may be submitted to the manufacturer.

Monthly bulletins are submitted to members showing typical complaints of the preceeding month. A number of department stores subscribe to this service and other stores submit their adjustment from time to time. This service protects the stores from unjust complaints from customers or if the complaint is justified, the store has recourse to the manufacturer.

The examining of fabrics and garments submitted by mills, finishers, converters, and manufacturers has shown a marked increase. These examinations are conducted in order to determine the cause of the defective condition and which process or operation was responsible for the condition. This service is used to settle disputes between the various persons handling the fabrics and the reports are often used for court evidence. The testing company foresees a continued increase in this type of work due to the change from a seller's to a buyer's market.

Mills Join Cotton-Textile Institute

The Cotton-Textile Institute announced April 15 that the following mills have been elected to membership: Bath (S. C.) Mills; Micolas Cotton Mills, Opp, Ala.; Royston (Ga.) Mills, Inc.; Halifax Cotton Mills, Inc., South Boston, Va.; Grace Cotton Mills Co., Rutherfordton, N. C.; Budlong Mfg. Co. and Cranston Braid Co., Cranston, R. I. New directors elected at the last meeting of the board include: William J. Erwin, Republic Cotton Mills, Great Falls, S. C.; B. F. Hagood, Glenwood Cotton Mills, Easley, S. C.; John F. Matheson, Mooresville (N. C.) Mills, and Floyd W. Jefferson, Fitzgerald (Ga.) Cotton Mills. William H. Beattie of the Wallace Mfg. Co., Jonesville, S. C., was elected to the executive committee.

Produce Textile Fiber From Peanut Protein

Three large chemical firms have undertaken the production of textile fiber from peanut protein. These firms are Virginia-Carolina Chemical Co. of Richmond, Va., Aralac, Inc., of Taftsville, Ohio, and Sessions, Inc., of Enterprise, Ala. Virginia-Carolina is reported to be prepared to enter commercial production. Textile fibers produced from peanut protein has been one of the successful projects of the Southern regional laboratory of the Department of Agriculture at New Orleans. Production of peanuts increased considerably during the war and the Bureau of Agriculture Economics believes the crop of picked and threshed peanuts this year will exceed two billion pounds.

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(Continued from Page 14) their market conditions are such that no single level of prices or market conditions could be quoted as fairly descriptive of the entire industry. Within the major divisions exist still further well defined areas of competition and, even on the same fabric construction, differences may be noted between the practices of individual sellers. In certain constructions of gray goods, while nearby deliveries have commanded exceptional premiums, future contracts have frequently been sold at a substantial discount amounting to 25 or 30 per cent by important sources. Elsewhere, the same quotations hold for all deliveries and in certain fields transactions are booked only 60 or 90 days in advance. All this adds up to the fact that generalities are meaningless when applied to the industry as a whole. Price restraint has been practiced widely on many occasions and there is every reason to expect that market valuations will promptly reflect any fundamental changes in the individual situations.

Already it is becoming evident that the pattern of demand is changing. For five years, including 1946, virtually all types of goods found a ready market, without regard to volume or price. Despite the precipitate decrease in government buying beginning late in 1945, replenishment needs of the trade and of the consuming public were more than sufficient to absorb the increased quantities that were made available last year. Matching the dislocations of price and production which were uncovered by termination of war controls, was the further revival of demand from a wide variety of distributive interests whose needs had been subordinated under government directives. The return of open markets in the final quarter of 1946 thus saw a heavy demand for goods from both old and new customers primarily for the purpose of restoring trade inventories and replenishing pipe lines of supply. These conditions of intense activity on the buying side of the primary market continued well into the current year and in many areas, spot supplies will command a premium over future contracts. Elsewhere, recent reports from the trade at large and especially in retail channels, are concerned with consumer price resistance, mounting inventories and hand-to-mouth buying policies.

Although these warnings are not free of buying propaganda in the natural play for price reductions, it would be unwise to dismiss them lightly in the face of disappointing statistics on retail sales. Here, too, generalities can be misleading since in various cotton goods departments, sales increases excel those of the store as a whole and reflect a healthy demand in the course of satisfaction. In apparel lines and some household products, where the elements of style, color and design are all important, war models have not yet been completely absorbed and represent a drag on distribution since their appeal to the public must be made largely on a price basis. Regardless of such variable situations, however, inventory accumulation at any stage of distribution which results in the adoption of a tight buying policy represents a check on the increased flow of goods through distribution channels. It emphasizes the digestive nature of the current quarter and the all important function of the consuming public as the court of final reckoning.

This change in retail buying habits, through its emphasis on more selective purchases, will probably accelerate the adjustment of production to the most urgent market needs and hasten the correction of those price levels which have been bid up to unwarranted heights. Such developments

are normal and beneficial under the influences of supply and demand forces. The serious danger to the economy is that policies of repression, once instigated, may be carried too far with under-estimation of the consumption requirements and over-estimation of the amount of available supply. Certainly all indices of employment and national income point to a continuing need for large quantities of textiles for the many purposes of industrial, household and apparel uses. The present availability of these textile products is a long step forward from the queues of last year and, unless all signs fail, there is every reason to expect a greater abundance at values, no longer at scarcity levels, but in keeping with the improved balance between supply and demand.

Regardless of the ebb and flow in trade inventories, or temporary maladjustment in retail values, it is unlikely that the public needs for textiles have yet approached a position of satisfaction. In this country, ten million consumers have been added since the pre-war year of 1939 and total income has increased from an annual rate of 70 billion dollars to 175 billion. According to our chart figures, an increase of 651 million square yards in woven cotton goods made available for domestic consumption in 1946 over 1939 was barely enough to supply the population increase at the per capita level of the pre-war year. In addition, export demand has more than doubled, from 367 million square yards in 1939 to 775 million for 1946. World shortages are still unrelieved and conservative authorities in this field look for more than a billion square yards in total for 1947. If accomplished, this would be an all-time peak in foreign trade for cotton goods. Thus the background remains one of large needs both at home and abroad which are closely interwoven with the continuing economic health of the nation.

Public Relations Project Is Summarized

Some 300 cotton manufacturing firms, which are sponsoring a concerted effort to awaken the American public to the size, progress and importance of the cotton textile industry, received during the first part of April a report summarizing the first half-year's operations of the program. Inaugurated without fanfare last October, after several months of preparation, this industry-wide public relations undertaking seeks to correct false impressions in people's thinking about cotton textile mills and to raise the standing of the industry through better understanding by men and women everywhere of its technological and social advances.

Sponsoring firms, in both North and South, are making the program possible by subscription on a basis of one cent a spindle annually. A majority of the largest units in the industry is now numbered among the sponsors and the total of participants is growing as a result of increasing interest in the purposes and progress of the program. Administration is handled by an autonomous group of mill principals and executives known as the Cotton Mills Industry-wide Committee on Public Relations, headed by G. Ellsworth Huggins of Martel Mills and Henrietta Mills, chairman.

The task of carrying out the program was assigned to the New York firm of public relations counselors, Dudley, Anderson and Yutzy, who in turn set up an agency called the Cotton Mills Information Service, with a field staff to operate in the mill areas of New England and the South. Operating as a news bureau specializing in feature stories, pictures and other items of factual information about the mills, the Cotton Mills Information Service furthers wider



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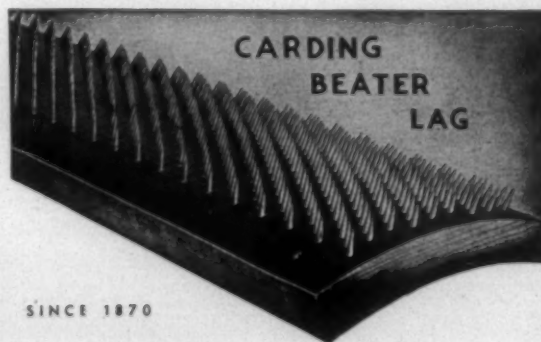
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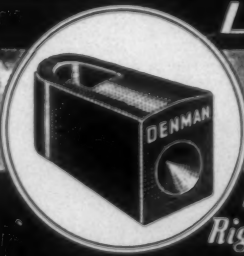
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dissemination of accurate information concerning the industry through such channels as the public press, magazines and radio.

The program has an internal phase as well, designed to encourage the development of public relations activities within the industry. In the past six months, 14 public relations clinics for top management have been held in the various mill areas, attended by more than 300 principals and executives. At such meetings, the subject of local public relations is the primary topic. Eleven of the meetings have been held in the South and three in New England, where more are scheduled now that seasonal traveling problems have lessened.

Other activities of the program include the preparation of several booklets for public distribution, publication of special items to be posted on mill bulletin boards, the facilitating of trips by magazine writers to visit mill areas, as well as voluminous correspondence with writers, editors, educators and other distributors of information. The program is in a position to supplement public relations activities of existing trade associations of the cotton textile industry and co-operates closely with them. Close supervision is exercised by the Cotton Mills Industry-wide Committee on Public Relations, which is responsible to the sponsoring companies. This committee is constituted as follows:

G. Ellsworth Huggins, Martel Mills and Henrietta Mills, chairman; George Nichols, Dwight Mfg. Co., secretary; Fuller E. Callaway, Jr., Callaway Mills; Charles A. Cannon, Cannon Mills; James A. Chapman, Inman Mills; Donald Comer, Avondale Mills; Norman E. Elsas, Fulton Bag & Cotton Mills; P. H. Hanes, P. H. Hanes Knitting Co.; Gordon Harrower, Wauregan Mills; C. C. Hertwig, Bigg Mfg. Co.; Luther H. Hodges, Marshall Field & Co.; George H. Lanier, West Point Mfg. Co.; Harvey W. Moore, Brown Mfg. Co.; Paul A. Redmond, Alabama Mills; William A. I. Sibley, Monarch Mills; Donald B. Tansill, Pepperell Mfg. Co.; Paul B. Welles, Pequot Mills; ex-officio, Percy S. Howe, Jr., American Thread Co., and Walter S. Montgomery, Spartan Mills.

Textron Reports Consolidated Net Earnings

Consolidated net earnings of Textron, Inc., for the year ended Dec. 28, 1946, after excluding minority interests, earnings of subsidiaries prior to acquisitions, and after setting aside a \$1,000,000 contingency reserve, totaled \$6,475,000 equivalent after preferred dividends to \$6.16 a share on the 1,010,932 shares of common stock outstanding. Royal Little, president, reported to stockholders in the annual report released April 24. This compares with a net loss of \$147,338 reported for the year 1945.

Bank loans, incurred mainly to purchase Nashua Mfg. Co. and Textron Southern, Inc., which totaled \$17,272,000 on Sept. 1, 1946, have been reduced currently to \$3,500,000. Textron's consolidated figures at the year end show current assets of \$36,626,000 and current liabilities of \$18,538,000, leaving net working capital of \$18,088,000. Such of the inventories as were valued on the last-in, first-out basis, were carried at approximately \$7,420,000 below replacement value.

Consolidated sales for 1946 were \$112,952,000, of which approximately 25 per cent consisted of Textron labeled products, 25 per cent Nashua's Indian Head and other branded products, 30 per cent Lonsdale and Manville trade

named fabrics, and 20 per cent gray goods and carded yarn. During 1947, the report states, existing Textron lines will be supplemented with knitted tricot fabrics and women's knitted lingerie.

Discussing the Nashua Mfg. Co. operations, the report to stockholders states that a program to reduce blanket output by about 60 per cent and to achieve greater diversification and stability in demand through the promotion of new products, made insofar as possible of synthetics, has been put into effect. The production and sale of Purray rayon blankets will be continued and expanded as rayon becomes available. "During 1947 vigorous promotion of our many brand name consumer products will be continued," Mr. Little states. "It is anticipated that the advantages of complete integration will be particularly noticeable this year. We will continue to improve the quality of our brand name products without increasing prices, whenever possible."

Cotton Mills Nearing Peak Capacity

The gap between current operations and peak or capacity operations in cotton textiles has narrowed down to six per cent, according to the Cotton-Textile Institute. At this time in 1939, the last peacetime year, the spread between actual and capacity operations was 37 per cent. Capacity in cotton textiles, as demonstrated during the war years, is 110 hours weekly. On the basis of approximately 22 million operable spindles, capacity operations are figured at 31½ billion spindle hours each quarter. During the first quarter of this year, the industry operated at 29.8 billion spindle hours.

Commenting on these statistics, Paul B. Halstead, institute secretary-treasurer, stated, "This is an extremely narrow spread and offers convincing proof that the industry is straining every effort to meet all of the unprecedented demands being made upon it." Reasons assigned for current demand for cotton textiles by Mr. Halstead are the 12 million increase in the national population, a decrease in the industry's physical plants of about two million spindles, the sharp expansion in national income and the impressive gains recorded in exports of cotton textiles.

Chemical Industries Mobilizing For Exposition

Announcement of the 21st Exposition of Chemical Industries to former exhibitors brought an almost instantaneous response, and a large proportion of them promptly re-engaged spaces previously occupied. Interest in the exposition is running at high pitch, giving assurance that four floors of Grand Central Palace, New York City, will be fully occupied. The exposition will be held during the first week in next December. As heretofore, the display will combine chemicals and chemical products with all manner of equipment employed in chemical manufacture and by the processing industries. Because chemical ingredients and chemical process steps are almost universally employed, even in mechanical industries, few lines of activity are outside its scope.

Looking forward to the more complete liberation of industries from the yoke of wartime restrictions, manufacturers of both chemical products and processing equipment anticipate many innovations, resulting from development work, which has been in the laboratory since the pre-war period. The exposition, as heretofore, will be under the management of the International Exposition Co. Charles F. Roth is manager and E. K. Stevens associate manager.



Portrait of a Champion

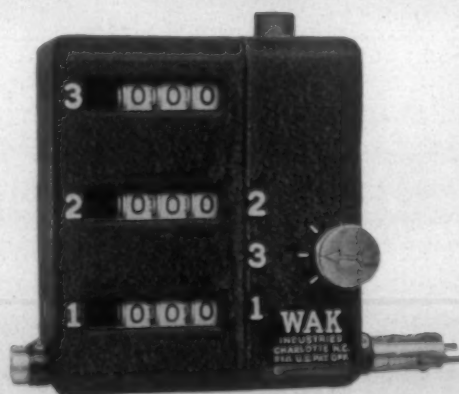
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Cotton Goods Market

A general lack of activity continues in New York City's Worth Street gray cloth market. The general opinion is advanced by some buyers that little support for the print cloth and sheeting markets will be found until prices on these fabrics get down closer to former O. P. A. levels. This point of view, however, is challenged by selling house men who remind that the current lull is not all because of prices. Regardless of the price structure in gray goods, they say, purchases will not buy third quarter production now. Generally, selling house circles admit though that current quotations are too high.

There is no indication of any great softening in the fine goods trade, it is reported, as sellers still maintain their price levels in the face of buyers' resistance.

General opinion holds that there will be no great drop in the price level of the market despite the recent sale of lawns at prices well below market quotations. Sources point out that these cloths, coming from a Southern mill, are inferior in quality to those offered by New England mills in arguing that there was more to the sale than a weakening market. They declare that the demand for fine gray cloth is still very strong and the supply inadequate to meet this demand.

One factor in relieving the need for more desirable fine goods may be the changing of looms from the less desirable cloth to those in strong demand. One source declares that many of the mills which are now manufacturing curtain goods can be expected to go off these and onto voiles, lawns and dimities.

Continuing scarcity of fine gray goods is driving many of the regular converters of these goods out of the market. Some of these firms are now jobbing the same goods that they formerly converted while others have gone over to more easily obtainable fabrics, it is said.

One commission agency admits its current sheeting and print cloth quotations are too high and would like to lower them in order to move substantial amounts of third-quarter production yet unsold, but the mills have advised the selling executives in the New York market to stand pat.

Another house has been attempting to sell its week's quota of sheeting off-goods around the market without success, but the mill refuses to sell at lower prices. Sit on them, is the way this producer answered the selling concern's inquiry.

Fair-sized amounts of goods are being offered in the second hand market, though here, too, even at prices lower than mill quotations, there is only moderate buyer interest. Several users report offerings being made now without a price mentioned, the holders willing to accept bids.

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Cotton Yarns Market

Manufacturers in some lines are said to figure that on the basis of average yarn costs for deliveries taken in during the last four months, they can afford to grant reasonable concessions on finished goods, sufficient to placate retail outlets until seasonal spring business takes hold. Dealers report numerous accounts are more interested in better quality than slight reductions in prices. Since Easter, it is stated, retail disposal of cotton fabrics and garments has been better than expected. In some quarters it is indicated that while many buyers have exerted pressure for lower yarn prices, this primarily is intended to help protect manufacturers' profit margins that still remain ample.

The Census Bureau has reported that the cotton spinning industry operated during March at 125.4 per cent of capacity, on a two-shift, 80-hour week basis, compared with 125.6 per cent during February this year, and 114.1 per cent during March last year.

Spinning spindles in place March 31 totaled 23,807,720, of which 21,953,050 were active the last working day of the month, compared with 23,854,572 and 21,954,340 for February this year, and 23,814,386 and 21,413,108 for March a year ago.

Active spindle hours for March totaled 10,029,440 or an average of 421 hours per spindle in place, compared with 9,590,439,779 and 402 for February this year, and 9,132,654,958 and 383 for March last year.

Lint cotton consumed during March totaled 875,124 bales, compared to 840,463 in March of 1946. Consumption for the eight months ending March 31 totaled 6,919,450 bales of lint, compared to 5,957,068 for the corresponding period a year previously.

Final official reports show that last year's cotton crop totaled 8,640,000 bales (of 500 pounds gross), the second smallest since 1896. This figure, given by the Agriculture Department, is based on final ginnings as reported by the Census Bureau.

Production in 1945 was 5,015,000 bales and the 1935-44 average is 12,553,000 bales. The smallest crop since 1896 was 7,945,000 bales in 1921. The record is 18,946,000 bales in 1937. The department estimated the price received for lint cotton from the 1946 crop sold before April 1 averaged 32.6 cents a pound. This is 10.1 cents above the average for the 1945 season and 19 cents above the ten-year average.

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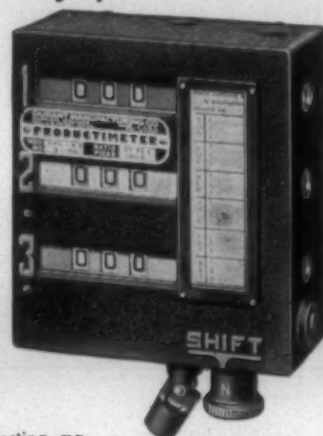
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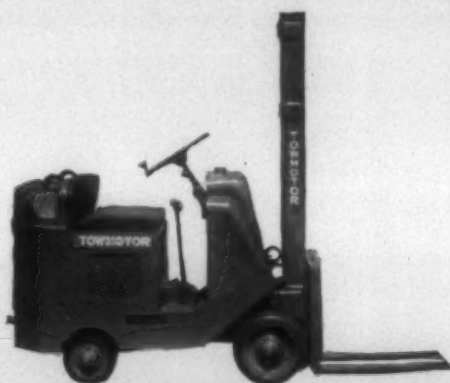
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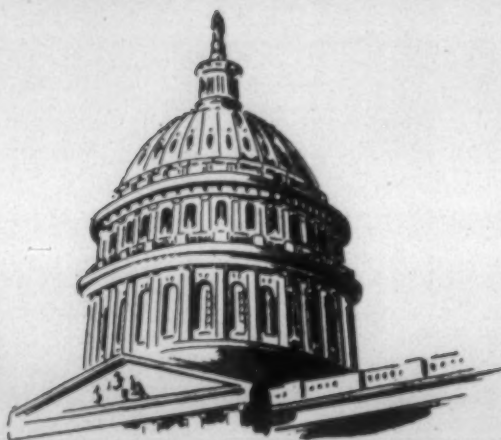
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WATCHING WASHINGTON

[Exclusive and Timely News from the Nation's Capital]



Mr. Truman is being told by his economic advisers that a turn in the business cycle is near at hand, and will be sharply felt in the latter half of 1947. Prices, under buyer resistance, are tilting down, and cutting into profits. Wage rates are not expected to decline now, but unemployment may mount to 5,000,000 by the year's end. Mr. Truman is being told privately that any further pushing up of wage rates will add to his difficulties and to the nation's troubles.

The truth is that the artificial underpinning put under the national economy a year or more ago in big wage increases is weakening as consumer resistance stiffens, and planned decreases in prices is not checking the fall. The President is setting up a momentary alibi in demanding price cuts and, at the same time, urging wage increases. He knows this formula won't work.

While O. P. A. is a thing of the past, the government still controls wages, which is the chief factor in price levels. Even high paid workers are backing away from goods as they are priced now, or buying cautiously. There's no indication that still higher wages would change this trend.

As the President and his advisers become better acquainted with the economic facts of life, labor unions and their leaders are digging in to resist an expected downward trend in wage rates early next year. Unemployment is expected to grow in woolen textiles, building and housing, luxury goods and automobiles. The prospect of new large scale strikes is vanishing. Coal mining is the chief major trouble spot.

Minor strikes are expected to continue to plague the country for another six months. Electrical and telephone workers are deadlocked over wages and new contracts, and a maritime strike is threatened on June 15. But many rank and file workers are averse to striking when it may mean prolonged unemployment. There's mounting rebellion in many of the unions against more strikes and arbitrary demands on employers. The prospect of new labor legislation is strengthening the resistance to radical leadership and to Communist control in many of the big unions.

Labor legislation finally emerging from Congress will be, in the main, the House-passed bill, with some modifications and changes. A Senate majority is not in sympathy with the severely compromised bill reported out by the Senate Labor Committee. Several of the Taft and Ball proposals rejected by the committee will be inserted as Senate floor amendments. The two bills sent to conference will not be far apart.

The all-embracing House-passed bill will allow inclusion in the conference agreement of most of the Taft and Ball proposals even if rejected by the Senate. Conferees may not insert provisions not contained in one or the other bills passed by the House or Senate. The House bill is so broad as to give conferees the utmost latitude. The House with its overwhelming majority in passage is disposed to insist on the retention of all major features in its bill.

Whether the President will veto a labor enactment when it comes to him is known neither to him nor any one else. Labor leaders are loosely forecasting a veto to dull Senate support of strong legislation. A veto will be over-ridden in the House, and stands the prospect of getting the two-thirds majority in the Senate.

The President is striving to avert an open break with the Republican controlled Congress until at least next year's appropriation bills are out of the way. There is a disposition to accept both labor and tax reduction legislation if Congress does not cut too deeply in slashing departmental expenditures next year. A veto of either labor control or tax reduction bills would promote an open break on appropriation bills, most of which will not be finally passed before June.

Senators Morse (R., Ore.) and Ives (R., N. Y.) were successful in striking out bans on industry-wide bargaining and the closed shop in the labor bill reported out by the Senate Labor Committee. Both provisions will probably be accepted as floor amendments. An amendment by Senator Ball (R., Minn.) would restrict bargaining areas to employers and employees "within the same met-

ropolitan district or county," and make all wage agreements subject to the anti-trust laws.

An amendment to be offered by Senators Ball, Byrd (D., Va.), George (D., Ga.), and Smith (R., N. J.) would outlaw all welfare funds, or the payment of anything of value by an employer to a union representative, and providing penalties of fine or imprisonment, or both, for violations.

Union leaders concede the enactment of sweeping labor legislation by Congress, but pin hope on a veto by the President which will not be overridden by the Senate. A. F. of L.'s executive council is spending \$1,500,000 in an advertising broadside in daily newspapers to oppose legislation as a "move toward totalitarianism." The plan is to "expose point-by-point the dangers of the Taft-Hartley anti-labor program."

Strategy of Senators Ives and Morse to split labor legislation into four or five separate bills, and allow the President to accept or reject as he chose, fell apart at the seams as Senator Taft (R., O.) insisted on one omnibus bill. Taft is supported by the strong contingent of senators of Southern and Western farm and live stock states, whose constituents are urging sweeping and effective legislation.

Definite wane in the power and influence of labor leaders is seen in the overwhelming House vote of 308 to 107 for the Hartley bill. In paying for abuses of power, the unions face restrictions on strike rights, application of injunctions, equal rights for employers, registration and accounting of funds, shutting down industries at will, or waging jurisdictional warfare with each other. There will be common rules and standards for both unions and employers.

Tax revision is likely to emerge from the Senate in a form that meets the approval of House majority leaders. The House-passed bill will not be very much changed by the Senate. Minority leaders in both branches are urging the President to accept the bill as finally enacted. The reason is that revenues are running far ahead of the President's January estimates, and a business recession

without tax reduction will put the President's party in a difficult position next year.

Cutting the high cost of government itself through realistic and effective reduction in taxes is held by many members of both branches to be a substantial step toward lower consumer prices. In eight years the cost of the Federal Government has increased 371 per cent, against price increases in the same time of 70 per cent in manufactured products, 77 per cent for clothing, and 93 per cent for food.

The President's budget message in January predicted a deficit of \$2.3 billion at the end of the fiscal year of 1947. High revenue receipts, however, have already turned this estimate into a surplus of \$1.5 billion, with the possibility the surplus will reach \$2.2 billion by July 1, when the next fiscal year starts.

Higher postage rates on all except first class mail will soon be ordered by Congress. First class rates, due by law to drop to two cents on July 1, will be pegged at three cents. Post cards will be raised to two cents, and air mail letters to six cents. Special delivery stamps for letters will cost 20 cents, and for packages, 45 cents. Parcel post rates will be raised from 25 to 33 per cent.

The Post Office Department is running a deficit of \$300,000,000 this year, chiefly due to the big pay raises given to postal workers in 1946. Some of the deficit is inherited from previous years in handling armed service mail, and the huge volume of franked mail for the government. The new postal rates will be about 100 per cent in excess of the applicable rates of 1927.

House members are astonished at the sweep and force with which cuts in appropriation bills are being made by Chairman Taber of the House Appropriations Committee. With less than one-fourth of the bills reported out, the cuts under budget estimates aggregate \$850,000,000, and with other cuts in prospect of about \$4,500,000,000. The Senate will restore some of the items that have been cut out.

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